2024 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 2024

Information	Stafford Borough Council Details
Local Authority Officer	Shaun Baker
Department	Operations
Address	Civic Offices Riverside Stafford
Telephone	01785 619000
E-mail	sbaker@staffordbc.gov.uk
Report Reference Number	2024 ASR
Date	June 2024

Executive Summary: Air Quality in Our Area

Air Quality in Stafford Borough

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. In the UK, it is estimated that the reduction in healthy life expectancy caused by air pollution is equivalent to 29,000 to 43,000 deaths a year[1].

Air pollution particularly affects the most vulnerable in society, children, the elderly, and those with existing heart and lung conditions. Additionally, people living in less affluent areas are most exposed to dangerous levels of air pollution[2].

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.

Data presented in this report was collected during 2023 a time when increased 'home working' was prevalent and so may not be fully representative of past and future trends.

[1] UK Health Security Agency. Chemical Hazards and Poisons Report, Issue 28, 2022.

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

The findings of the annual air quality reports produced by Stafford Borough Council since 2004, are that air quality standards are met in Stafford Borough, and that no Air Quality Management Areas (AQMA's) are required. The findings of this 2023 ASR again shows that the air quality standards are complied with and that there is no need to declare an air quality management area in our Borough.

Traffic pollution generated by the M6 motorway around Junction 15 for Stafford and at Clayton continues to cause the greatest concern, however, NO_2 levels here continue to be below the annual objective limit despite disrupted traffic works on the M6 motorway.

The construction of the M6 'smart motorways' scheme commenced during 2018 and is nearing completion with, in 2023 the further adaptation of 4th lane lay-by's, this has impacted traffic flows significantly during the reporting period for this ASR with speed restrictions.

Pollution from the M6 motorway is not getting worse over time, this is likely to be because of improved vehicle design and engine emissions controls combined with the growth of Electric Vehicle (EV) use and the change in 'rush hours' resulting from more home working.

HS2a construction was cancelled in 2023, and many of the actions previously proposed to manage altered traffic flows are no longer relevant.

The Council began working in partnership with Staffordshire County Council to significantly grow the availability of public and residential electric vehicle charge-points.

The refreshed Borough Council Air Quality strategy is to be published in 2024.

Endorsement from the Director of Health and Care, Staffordshire County Council

Staffordshire County Council (SCC) is committed to working with partners to ensure that Staffordshire will be a place where improved health and wellbeing is experienced by all. Poor air quality has a negative impact on public health, with potentially serious consequences for individuals, families, and communities. Identifying problem areas and ensuring that actions are taken to improve air quality forms an important element in protecting the health and wellbeing of Staffordshire residents. Improving air quality is often a complex issue, presenting a multi-agency challenge – so it is essential that all agencies work together effectively to deliver improvements where they are needed.

As Director of Health and Care across Staffordshire I endorse this Annual Status Report which sets out the position in all the Local Authorities across Staffordshire and Stoke-on-Trent focusing on human made pollution with particulate matter.

The Air Aware project (phase 2) ran until March 2023 with Defra funding, however The Air Aware project continues with joint funding from SCC Public Health and Connectivity Teams to March 2025. The project delivers behaviour change to increase active travel, decrease car use, and raise awareness of air quality issues through five elements.   These are business and school engagement, communications and campaigns, electric vehicles, and air quality monitoring in targeted locations. Campaigns include Anti-Idling, walking and cycle activities and Clean Air Day. These have been countywide engaging a large number of businesses and schools. The programme focuses on reducing levels of NO and PM, which are monitored at key locations.

A number of the Staffordshire Authorities are currently involved in implementing measures to reduce levels of N02 within their areas, which are detailed elsewhere in their ASR. Since the update of the Environment Act 2021 there is now a statutory duty imposed on Local Authorities in England to reduce PM2.5, a number of the measures are complementary with those being undertaken to improve Air Quality. A mapping exercise completed by the Staffordshire Air Quality Forum members details the measures currently in place which are considered to have an impact in reducing PM2.5 within the County.

Post Covid the Staffordshire and Stoke-on-Trent (SOT) Air Quality Forum has recommended meeting on a quarterly basis. This forum involves all the Districts and Boroughs and both SCC and SOT and is chaired on a rotating basis across the Districts and Borough's.

In addition, Levelling up Fund 2 Schemes will improve a number of major roads around the county, reduce journey times, put greener, cleaner buses on main roads, improve walking and cycling routes and reduce the impact of housing and commercial developments. They will benefit East Staffordshire, Cannock Chase, and Stafford Borough. Total package cost circa £20m.

Finally, it's worth mentioning both Climate Change and The Local Transport Plan 4 (LTP4). SCC have signed up to the Climate Emergency and since signing up have reduced its Carbon footprint by 50%. We are now also now working towards LTP4, with our Local Authority partners. LTP4 will come into effect in 2025 and will have a positive effect on Air Quality over the coming years

Dr Richard Harling

Director of Health and Care
Staffordshire County Council
[June 2024]

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 Environmental Improvement Plan[3] sets out actions that will drive continued improvements to air quality and to meet the new national interim and long-term targets for fine particulate matter ($PM_{2.5}$), the pollutant of most harmful to human health. The Air Quality Strategy[4] provides more information on local authorities' responsibilities to work towards these new targets and reduce fine particulate matter in their areas.

The Road to Zero[5] details the Government's approach to reduce exhaust emissions from road transport through a number of mechanisms, in balance with the needs of the local community. This is extremely important given that cars are the most popular mode of personal travel and the majority of Air Quality Management Areas (AQMAs) are designated due to elevated concentrations heavily influenced by transport emissions.

Stafford Borough Council does not have any Air Quality Management Areas however it remains important that improvements to air quality are pursued wherever possible to maintain this position. Stafford Borough Council has important regional motorway and trunk routes and as a result is keen to identify systems that will improve transboundary pollution levels, for this reason the Council is producing an Air Quality Strategy Document 2024-2026 (reproduced in draft in the appendix) and is a full member of the Staffordshire ECO stars initiative.

In March 2019 the Council applied for and was awarded a £1million grant from the Office of Low Emission Vehicles in partnership with Stoke on Trent City Council and Newcastle-under-Lyme Borough Council to provide 30 shared of the fastest rapid electric vehicle chargers primarily for the hackney carriage / private hire trade. Low emission public transport, such as electric taxis, are important both to reduce traffic emissions but also to offer and promote new cleaner technologies for all to use. This project has now delivered

---

[3] Defra. Environmental Improvement Plan 2023, January 2023

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

[5] DfT. The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy, July 2018

10 chargers in the Borough (pictured below) and there is a growing interest in low emission vehicles from the Taxi trade.

The Borough Council is working in partnership with Staffordshire County Council, to identify a swathe of new electric vehicle charging sites as part of a strategy to install more public charge points across the Borough. www.staffordshire.gov.uk/Transport/Sustainable-Travel/Electric-vehicles/02-SCC-Public-EV-Charging-Strategy-V3-3.pdf

Conclusions and Priorities

- The air quality in Stafford Borough does not exceed the air quality standards, and traffic pollution has not worsened, there remains however significant pressures which may result in future challenges. Stafford Borough Council is undergoing a time of considerable housing growth (c 7,000 homes by 2025) and commercial investment with the added prospect of a HS2a hub station and associated Stafford Gateway Project business growth despite the cancellation of the main route through the Borough. The local traffic that this growth will generate needs to be managed so that the burden of extra vehicles does not result in a significant deterioration of our local air quality. Air quality monitoring stations to target this risk were installed commencing 2024.

- The new Western Distributer Road in Stafford opened in 2021 and is relieving traffic congestion at busy times furthermore this will link with the Stafford Gateway Project based around the new HS2 station hub.

- All planning applications for new housing and commerce are assessed for the air quality impacts and it remains a Council priority to consider air quality impacts for all new industrial developments.

- Motorway emissions remain a significant concern for Stafford Borough, the construction of the M6 smart motorway scheme is nearing completion awaiting improved lay-by provision, it has though delivered extra capacity and evidence suggests that traffic emissions through the Borough have stabilised.

- It remains likely that the large urban area of Stoke on Trent and Newcastle under Lyme will enforce a low emission vehicle zone, this may have the effect of diverting traffic onto neighbouring roads in Stafford Borough. Stafford Borough Council air quality monitoring stations have been positioned to target this potential risk.

- Air Quality and air emissions are included in the Council's Climate Change Strategy

Local Engagement and How to get Involved

Public participation in the national and local air quality issues is vital to maintaining the current standards. In particular road journeys, transport mode choices, commuting methods and alternative travel methods can have significant local effects. Travel to and from and around schools is a priority and surveys have been undertaken in partnership with Staffordshire County Council and the University of the third age (U3A) group aimed at engaging children and parents in reducing school drop off emissions. The following bodies can all help to improve the general understanding of local air quality issues and how to effect positive changes.

Stafford Borough Council   Operational Services
                                         Sustainability Matters
                                         Planning and Development Control
                                         Climate Change Group

Staffordshire County Council
Stoke on Trent City Council
UK Air Defra.
North Staffordshire and Stafford Friends of the Earth
Public Health England
U3A University of the Third Age. West Midlands. Stafford Branch.

Local Responsibilities and Commitment

This ASR was prepared by the Regulatory Service of Stafford Borough Council.

Adoption of this ASR will be sought once appraised by DEFRA.

This ASR has been endorsed by the Director of Public Health.

If you have any comments on this ASR please send them to Shaun Baker at:

sbaker@staffordbc.gov.uk

Table of Contents

1 Local Air Quality Management

This report provides an overview of air quality in Stafford Borough Council during 2023. 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 Stafford Borough Council 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.

Stafford Borough Council has no AQMA's, a draft air quality strategy aimed at maintaining this position has been prepared and appears in the appendix.

2.2 Progress and Impact of Measures to address Air Quality in Stafford Borough Council

Defra's appraisal of last year's ASR concluded ; (responses in italics)

1. The Council should use the most up-to-date ASR Template which can be found here: Annual Reporting | LAQM (defra.gov.uk). Because the most up-to-date ASR Template was not used prescribed text is outdated or missing. For example, the ASR refers to LAQM.PG16 which has been updated to LAQM.PG22. Furthermore, the tables do not match with the excel template which results to notes or columns missing. For example, Table A.2 is missing the stie name and the notes underneath the table.

The latest 2024 template has been used for this report.

2. It is encouraging to see the Council considered the comments made during the previous appraisal and actively made an effort to address all of these actions for this year's ASR.

3. The council is commended for their approach to further improving Air Quality in the absence of a formal AQAP. Continued engagement with local residents is highly encouraged. The council are encouraged to continue to identify additional means to address further air quality concerns in future reporting years.

4. The council is recommended to continue to review their current monitoring regime, specifically the addition of several new non-automatic monitoring sites (diffusion tubes) across the region. This is important as additional sites will help to identify whether there are other key areas of relevant exposure where there may be exceedances and the appropriate measures can be adopted accordingly.

Four new sites have been established in 2023/4, one site has been 'mothballed'.

5. The council is commended for their measures to reduce PM2.5 emissions provided in Table 2.4 in the Addendum. The council have developed these measures to address PM2.5 emissions in future reporting years even though there is no statutory requirement for SBC to develop an additional action plan to address PM2.5 emissions at present. The Council is highly encouraged to continue to update this action plan in future reporting years.

6. The NO2 concentrations in SBC have continued are below the annual mean objective for NO2 in 2022 at all monitoring sites, which is very encouraging.

7. While a trend figure was provided in the ASR with the average NO2 concentration across all monitoring sites, it would be preferred if the annual NO2 concentration of each monitoring location was shown, additionally to discussing the trend of NO2 concentrations at individual monitoring locations. This is due to the average NO2 concentrations across all monitoring sites being impacted by the removal and addition of diffusion tube monitoring sites over the years which is not transparent in the way the trend in NO2 concentrations is currently displayed. A great example how to show the trend in NO2 concentrations is Figure A.1 in the most up-to-date ASR template.

The ASR trend figure has always included the same 12 sites which have not altered position over the years, many of the remaining sites have changed specific locations as street furniture to which tubes are attached have been replaced. A new trend graph is presented in this report encompassing 'all sites' annual mean over the 20 years.

8. The QA/QC of diffusion tube monitoring does not include a justification why the national instead of the local bias adjustment factor was used. Future reports should include a sentence that the local bias adjustment factor cannot be calculated as no NO2 monitoring is co-located with automatic monitoring sites as SBC does not conduct automatic monitoring.

Now stated in this report

9. Whilst it is welcomed for the Council to review their monitoring strategy and remove/add monitoring locations, changes to the monitoring network should be included in the chapter "Summary of monitoring undertaken" and not only in the comments in regards to the commentary of the previous ASR.

Now stated in this report

10. In Table A.4, the valid data capture for the monitoring period is missing. If the tubes were deployed form January to December, the valid data capture for the monitoring period is the same as the valid data capture in 2022. Furthermore, the note section of this table is incomplete. This should be considered in future reports.

Now corrected for 2023

11. In Table C.1 the version of the national bias adjustment spreadsheet is missing. It is mentioned in the subchapter "Bias factor", however, for consistency it would be beneficial to also add this information in the table in future reports.

Now added for 2023

12. In Chapter 4.4, the laboratory used to analyse the diffusion tubes is mentioned, however, it is not mentioned which analysis methodology was used. This information is only visible in the screen grab of the national bias adjustment spreadsheet. However, for consistency, this should be mentioned together which laboratory has been used in future reports.

Now included for 2023

Stafford Borough Council has taken forward a number of measures during the current reporting year of 2023/4 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2. three measures are included within Table 2.2, with the type of measure and the progress Stafford Borough Council have made during the reporting year of 2023 presented. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2.

Stafford Borough Council expects the table 2.2 measures to be completed or ongoing over the course of the next reporting year: Priority for the coming year is the uptake of EV Taxi's through the provision of additional charging sites.

Stafford Borough Council worked to implement these measures in partnership with the following stakeholders during 2023:

- Staffordshire Authorities

- National Highways

- Public Health England

The principal challenge to implementation that Stafford Borough Council anticipates facing are officer resources and influencing the TAXI trade.

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	Defra AQ Grant Funding	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	Air Quality incorporated into Climate Change Strategy	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2019	2022 ongoing	Local Authority Environmental Health, Local Authority Transport Dept.	Local Authority	NO	Not Funded	< £10k	Implementation	NIL	NIL	Air Quality incorporated into Climate Change Priority	Achieved and ongoing
2	TAXI Electrification	Promoting Low Emission Transport	Taxi emission incentives	2019	2040	Local Authority Environmental Health, Local Authority Transport Dept.	OLEV	YES	Funded	£500k - £1 million	Completed	reduced vehicle emissions	target to promote EV TAXI take-up	Finding suitable sites with TAXI trade	Funding and trade agreed TAXI Licensing changes.
3	ECO STARS (Staffordhire)	Vehicle Fleet Efficiency	Driver training and ECO driving aids	2015	2025	Local Authority Environmental Health, Local Authority Transport Dept.	DEFRA	NO	Partially Funded	£10k - 50k	Implementation	Reduced vehicle emissions	NIL	Future funding	First phase successful, second phase on-going

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[6], 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.

National

The National Pm2.5 Annual Mean Concentration target is 10 µg m-3 to be achieved by 2040 with a Population Exposure Reduction Target of 35% reduction by 2040.

The sources of the PM2.5 particles are estimated below:

- Primary PM2.5 Sources (approximately 50% of UK total) Comprising man-made emissions from combustion (industrial processes, residential and road traffic exhausts) and non-combustion processes (e.g. fugitive emissions from agricultural and industrial material handling; non-exhaust emissions from vehicles - tyre and brake wear, and road abrasion)

- Secondary PM2.5 Sources (approximately 50% of UK total). Not all of the particulate matter found in the atmosphere has been directly emitted into the atmosphere by man-made sources. Secondary PM2.5 comprises natural and transboundary sources.

Local

Stafford Borough Council is semi-rural in nature and the PM 2.5 background data for our Borough is given below:

- Stafford BC average concentration 2018- **7.2** µg m-3

- Stafford BC maximum concentration 2018 (1Kmx1Km) centred at M6 Junction 15 and also at M6 J13 is **8.9** µg m-3 of which it is estimated 50% is from secondary sources such as transboundary and natural causes.

---

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

Local actions to maintain and improve upon this position will focus mainly on the estimated 50% 'man-made' contributions in the short term over which there is some local control, as below:

- Industrial and commercial emissions.

  - Planning controls for new establishments and regulation of existing with emphasis on combustion activities.

- Residential Heating (in particular solid fuel use).

  - There are no smoke control areas in the Borough and there is not significant solid fuel use, however advice on proper usage and fuel selection is available and will receive greater emphasis on the Council website in 2024.

- Traffic engine emissions and tyre wear.

  - Links to traffic management actions already scheduled for action against other pollutants.

Table 2.4 in the appendix shows the joint approach of all Staffordshire Local Authorities to reduce PM2.5.

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

This section sets out the monitoring undertaken within 2023 by Stafford Borough Council and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a five-year period between 2019 and 2023 to allow monitoring trends to be identified and discussed.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic and Non Automatic Monitoring Sites

Stafford Borough Council undertook no automatic (continuous) monitoring.

Stafford Borough Council undertook non- automatic (i.e. passive) monitoring of NO_2 at 29 sites during 2023. Table A.2 in Appendix A presents the details of the non-automatic sites.

Four new diffusion tube sites were added in 2023/4 to investigate the proposed new HS2 train station traffic. The site at 'Weston' has been mothballed due to past compliance and changes in street furniture.

Maps showing the location of the existing 2023 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.
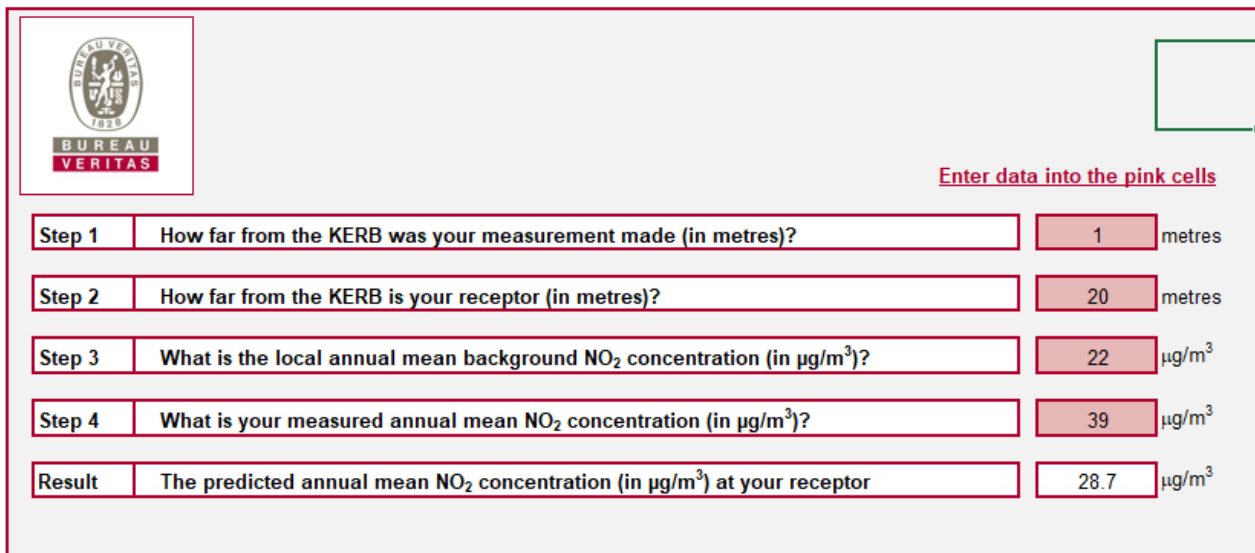
3.2.1 Nitrogen Dioxide (NO_2)

There are no measured exceedences of the Air Quality Standard for Nitrogen Dioxide concentrations in air in Stafford Borough in the year 2023.

Table A.3 and Table A.4 in Appendix A compare the ratified and adjusted monitored NO_2 annual mean concentrations for the past five 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 2023 dataset of monthly mean values is provided in Appendix B. Note that the concentration data presented in Table B.1 includes distance corrected values, only where relevant.

Example of Distance correction calculation (below)

Step 1	How far from the KERB was your measurement made (in metres)?	1	metres
Step 2	How far from the KERB is your receptor (in metres)?	20	metres
Step 3	What is the local annual mean background NO_2 concentration (in µg/m^3)?	22	µg/m^3
Step 4	What is your measured annual mean NO_2 concentration (in µg/m^3)?	39	µg/m^3
Result	The predicted annual mean NO_2 concentration (in µg/m^3) at your receptor	28.7	µg/m^3

Enter data into the pink cells

3.2.2 Particulate Matter (PM$_{10}$)

NIL

3.2.3 Particulate Matter (PM$_{2.5}$)

NIL

3.2.4 Sulphur Dioxide (SO$_2$)

NIL

Appendix A: Monitoring Results

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

Diffusion Tube ID	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) [1]	Distance to kerb of nearest road (m) [2]	Tube Co located with a Continuous Analyser?	Tube Height (m)
1		Kerbside	390220	325530	NO2	nil	30.0	5.0	No	2.0
2		Kerbside	390350	325410	NO2	nil	20.0	15.0	No	2.0
3		Other	390130	321700	NO2	nil	20.0	0.0	No	2.0
4		Kerbside	392914	340076	NO2	nil	50.0	0.0	No	2.0
5		Other	390231	334298	NO2	nil	0.0	0.0	No	2.0
6		Kerbside	394471	321462	NO2	nil	10.0	0.0	No	2.0
8		Kerbside	385680	342220	NO2	nil	15.0	0.0	No	2.0
13		Other	390310	332960	NO2	nil	50.0	1.0	No	2.0
14		Other	390090	333150	NO2	nil	0.0	1.0	No	2.0
16		Kerbside	388666	335429	NO2	nil	15.0	0.0	No	2.0
21		Kerbside	391105	328693	NO2	nil	60.0	0.0	No	2.0
22		Kerbside	393518	321916	NO2	nil	100.0	0.0	No	2.0
31, 32		Kerbside	391581	320743	NO2	nil	15.0	0.1	No	2.0
33		Kerbside	392154	319970	NO2	nil	15.0	5.0	No	2.0
36		Kerbside	394848	341145	NO2	nil	40.0	0.0	No	2.0
40		Other	384920	341520	NO2	nil	10.0	10.0	No	2.0
ST		Kerbside	390050	333270	NO2	nil	15.0	0.5	No	2.0
BB1		Kerbside	394830	341060	NO2	nil	35.0	0.0	No	2.0

Diffusion Tube ID	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) [1]	Distance to kerb of nearest road (m) [2]	Tube Co located with a Continuous Analyser?	Tube Height (m)
BB2		Kerbside	394290	341750	NO2	nil	30.0	0.0	No	2.0
BM		Kerbside	391561	390692	NO2	nil	30.0	0.0	No	2.0
TR		Kerbside	386450	341230	NO2	nil	25.0	0.0	No	2.0
TITT		Kerbside	387350	338490	NO2	nil	10.0	0.0	No	2.0
M6		Kerbside	385080	342022	NO2	nil	20.0	0.0	No	2.0
M6.2		Other	385096	342012	NO2	nil	0.0	25.0	No	2.0
E1		Kerbside	383166	329202	NO2	nil	10.0	0.0	No	2.0
M6 3		Other	385076	342092	NO2	nil	20.0	25.0	No	2.0
Weston		Roadside	394408	323726	NO2	nil	20.0	5.0	No	2.0
M6.4		Kerbside	385054	341841	NO2	nil	20.0	0.0	No	2.0

Notes:

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

(2) N/A if not applicable.

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

NIL

Table A.4 – Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg/m³) January 2023 to December 2023

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) [1]	Valid Data Capture 2023 (%) [2]	2019	2020	2021	2022	2023
1	390220	325530	Kerbside	n/a	100.0	30.0	27.8	20.0	29.1	29.8
2	390350	325410	Kerbside	n/a	100.0	32.0	23.4	22.0	21.3	30.4
3	390130	321700	Other	n/a	100.0	30.0	33.9	17.0	18.6	24.0
4	392914	340076	Kerbside	n/a	100.0	25.0	24.6	23.0	20.3	22.5
5	390231	334298	Other	n/a	100.0	36.0	27.1	34.0	36.4	33.1
6	394471	321462	Kerbside	n/a	92.3	28.0	27.2	23.0	28.3	31.5
8	385680	342220	Kerbside	n/a	92.3	30.0	31.3	28.0	35.9	33.5
13	390310	332960	Other	n/a	92.3	20.0	27.6	17.0	19.9	16.9
14	390090	333150	Other	n/a	82.7	21.0	18.1	15.0	18.4	22.1
16	388666	335429	Kerbside	n/a	82.7	36.0	33.9	17.0	19.4	26.4
21	391105	328693	Kerbside	n/a	75.0	19.0	23.1	**NIL**	20.2	21.5
22	393518	321916	Kerbside	n/a	82.7	26.0	23.4	24.0	26.9	25.2
31, 32	391581	320743	Kerbside	n/a	100.0	29.0	31.6	22.0	19.5	26.6
33	392154	319970	Kerbside	n/a	100.0	34.0	25.2	26.0	24.6	30.1
36	394848	341145	Kerbside	n/a	100.0	28.0	20.9	18.0	25.4	34.6
40	384920	341520	Other	n/a	92.3	20.0	15.1	17.0	17.4	27.4
ST	390050	333270	Kerbside	n/a	100.0	32.0	**40.6**	30.0	27.4	15.1

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2019	2020	2021	2022	2023
BB1	394830	341060	Kerbside	n/a	100.0	24.0	22.7	22.0	27.9	29.1
BB2	394290	341750	Kerbside	n/a	92.3	33.0	32.2	19.0	27.0	25.0
BM	391561	390692	Kerbside	n/a	92.3	21.0	23.4	20.0	20.5	26.4
TR	386450	341230	Kerbside	n/a	100.0	22.0	21.2	17.0	20.0	26.8
TITT	387350	338490	Kerbside	n/a	92.3	22.0	30.6	19.0	24.7	21.6
M6	385080	342022	Kerbside	n/a	100.0	31.0	26.8	26.0	26.7	22.6
M6.2	385096	342012	Other	n/a	100.0	22.0	28.1	23.0	22.5	31.1
E1	383166	329202	Kerbside	n/a	100.0	**new**	26.0	20.0	23.5	20.4
M6 3	385076	342092	Other	n/a	67.3	**new**	24.0	28.0	17.3	20.7
Weston	394408	323726	Roadside	n/a	84.6			**new**	24.6	28.9
M6.4	385054	341841	Kerbside	n/a	100.0			**new**	35.2	27.9

☒ **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) 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%).

Figure A.1 – Trends in Annual Mean NO$_2$ Concentrations

Chart A2 below shows the variation of NO2 concentrations over time. In the year 2000 5 trunk road sites and 8 M6 motorway sites were selected, these have remained in place for the last 23 years. The annual average concentration of NO2 at these 5 & 8 sites is plotted on the graph to identify trends.

The impact of the COVID pandemic is clear to see.

The combined annual variation is typically 5 microgrammes NO2 and despite the return to 2018/2019 traffic volumes in 2023 the 23 year trend for both types of carriageway is downwards at a rate approximating 0.3 microgrammes/m3 per annum.

Chart A2 (b) shows the annual mean results trend for all sites for that year, some sites have however been removed, new ones added or positions altered over the last 23 years. The trend indicates a decline in NO2 concentrations despite a growth in traffic numbers, perhaps attributable to lower emission design engines.

CHART A2 Nitrogen Dioxide Concentrations over Time.
Annual Mean results.
Red =5 Annually consistent kerbside trunk road sites
Blue=M6 Sites
Green = AQ NO2 Limit

NO2 Conc,microgrammes/m3

COVID

year 2000-2023

Chart A2(b) Nitrogen Dioxide Concentration Measured Since 2001

(chart: NO2 conentration vs reporting year from 2001)
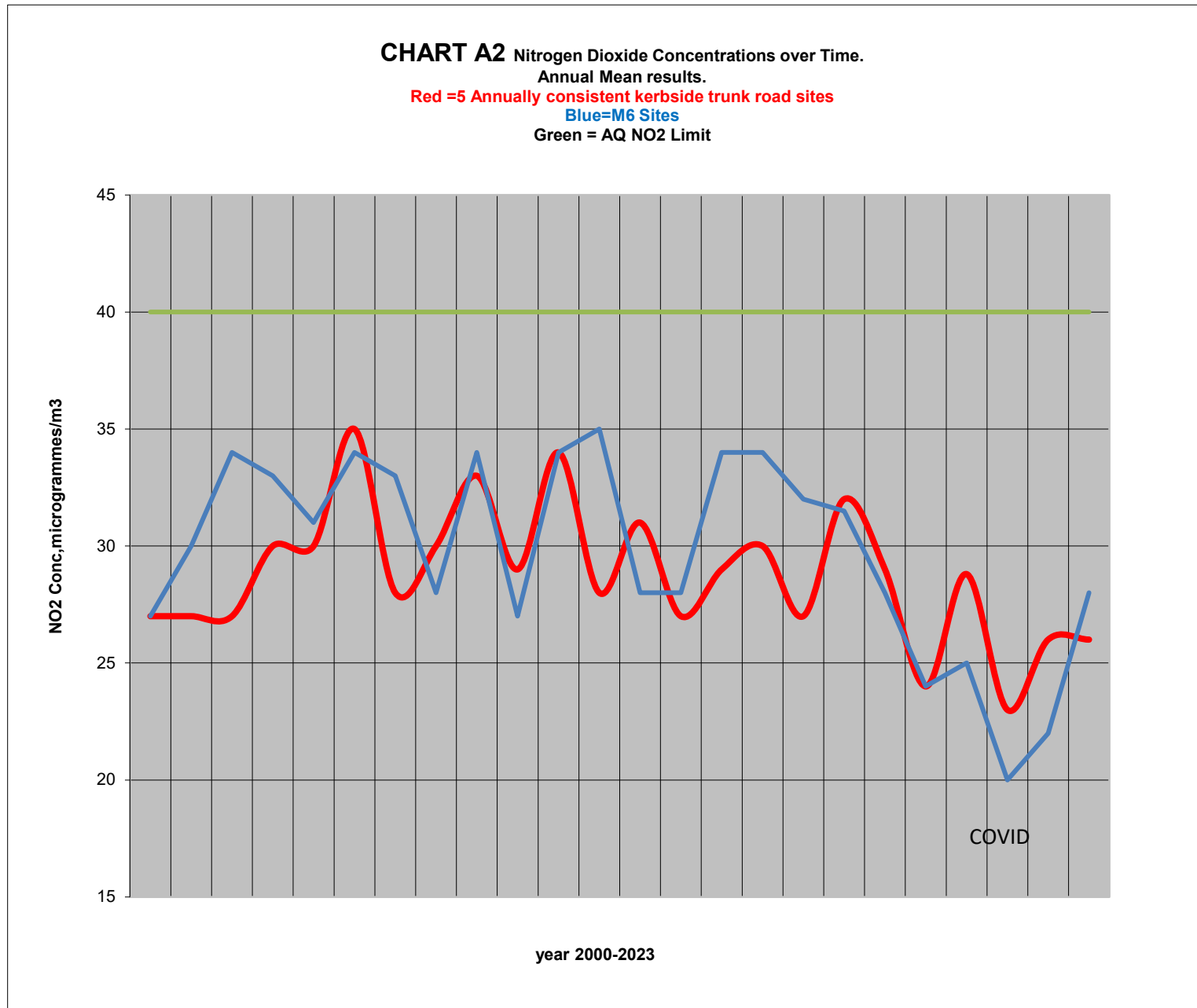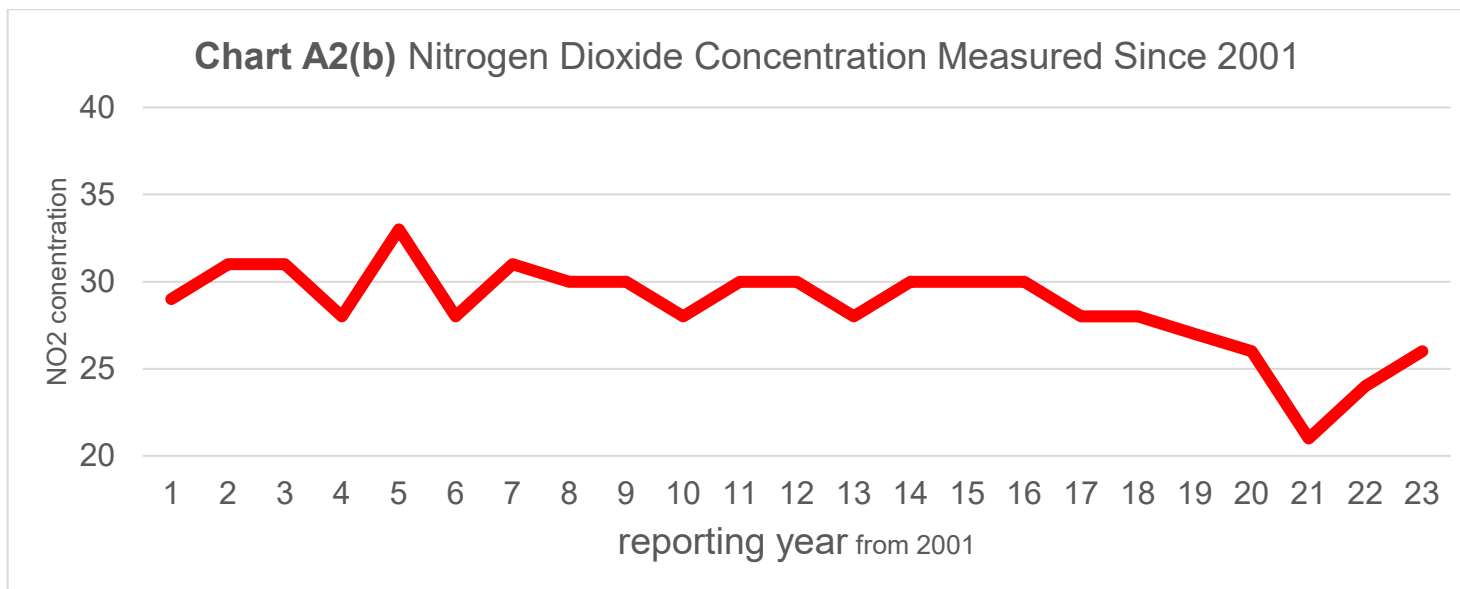
Table A.5 – 1-Hour Mean NO$_2$ Monitoring Results, Number of 1-Hour Means > 200µg/m^3

NIL

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

NIL

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

NIL

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

NIL

Figure A.5 – Trends in Annual Mean PM$_{2.5}$ Concentrations

NIL

Table A.9 – SO$_2$ 2023 Monitoring Results, Number of Relevant Instances

NIL

Appendix B: Full Monthly Diffusion Tube Results for 2023

Table B.1 – NO$_2$ 2023 Diffusion Tube Results (µg/m^3)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted <(x.x)>	Annual Mean: Distance Corrected to Nearest Exposure	Comment
1	390220	325530	38.0	33.5	57.1	26.8	27.6	19.0	35.4	59.7	27.1	26.0	33.6	26.8	34.2	29.8	-	
2	390350	325410	53.0	27.4	46.5	16.5	27.3	28.8	18.8	46.5	25.2	43.4	65.6	19.7	34.9	30.4	-	
3	390130	321700	22.1	49.5	36.1	45.3	36.8	8.7	9.7	31.7	26.9	12.7	31.2	20.0	27.6	24.0	-	
4	392914	340076	34.5	19.2	34.5	31.8	17.5	25.6	15.4	34.4	27.1	26.0	32.1	12.1	25.9	22.5	-	
5	390231	334298	35.6	20.1	22.4	57.5	25.1	42.9	34.0	55.4	27.7	78.4	25.5	32.2	38.1	33.1	-	
6	394471	321462	39.7	19.8	48.7	46.2	28.7	24.1	35.3	44.0	24.3	I/S	26.1	61.3	36.2	31.5	-	
8	385680	342220	41.6	35.8	34.2	26.6	39.9	42.9	27.6	79.4	I/S	12.5	39.2	43.8	38.5	33.5	-	
13	390310	332960	19.8	19.7	15.4	18.6	15.9	22.1	20.2	36.5	9.3	I/S	24.8	11.6	19.4	16.9	-	
14	390090	333150	40.3	19.5	32.8	35.1	32.2	13.2	12.5	I/S	25.3	I/S	26.7	16.8	25.4	22.1	-	
16	388666	335429	24.3	19.8	I/S	15.4	20.9	40.3	38.3	39.7	34.1	I/S	31.2	39.6	30.4	26.4	-	
21	391105	328693	20.1	42.9	I/S	I/S	34.9	20.6	34.7	13.9	27.4	I/S	12.5	15.3	24.7	21.5	-	
22	393518	321916	20.8	61.3	I/S	22.8	37.6	16.0	21.1	16.5	29.8	I/S	25.6	38.5	29.0	25.2	-	
31	391581	320743	18.9	20.5	44.7	I/S	37.2	16.1	30.7	18.7	26.9	I/S	24.1	16.5	-	-	-	Duplicate Site with 31 and 32 - Annual data provided for 32 only
32	391581	320743	28.2	I/S	65.6	39.2	35.5	16.7	35.6	42.1	9.3	26.0	47.1	48.5	30.6	26.6	-	Duplicate Site with 31 and 32 - Annual data provided for 32 only
33	392154	319970	21.3	55.3	32.8	40.3	32.2	17.3	37.4	35.7	26.8	27.1	41.3	47.9	34.6	30.1	-	
36	394848	341145	29.9	56.3	59.0	70.5	37.5	24.2	19.2	47.4	26.5	23.0	26.3	57.4	39.8	34.6	-	
40	384920	341520	34.3	49.3	32.3	25.4	37.1	18.4	36.4	37.1	32.8	I/S	25.1	18.1	31.5	27.4	-	
ST	390050	333270	17.6	17.0	12.4	13.7	11.9	18.4	12.8	22.6	11.3	13.0	16.7	40.9	17.4	15.1	-	

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted <(x.x)>	Annual Mean: Distance Corrected to Nearest Exposure	Comment
BB1	394830	341060	34.7	73.4	25.7	11.7	37.4	36.3	35.8	23.4	37.0	36.8	26.5	22.6	33.4	29.1	-	
BB2	394290	341750	24.4	37.5	58.8	33.1	21.7	30.5	19.5	34.7	27.1	I/S	12.0	17.4	28.8	25.0	-	
BM	391561	390692	23.2	83.8	36.0	40.5	29.8	43.3	17.8	16.8	9.4	I/S	11.9	21.5	30.4	26.4	-	
TR	386450	341230	18.0	42.9	34.4	34.4	29.7	11.4	33.2	33.4	29.3	27.7	33.7	41.2	30.8	26.8	-	
TITT	387350	338490	22.5	25.9	19.3	14.1	35.0	32.0	15.5	37.1	15.2	30.3	26.6	I/S	24.9	21.6	-	
M6	385080	342022	25.6	53.4	19.9	17.7	18.5	29.9	17.4	43.7	9.0	25.9	26.9	24.0	26.0	22.6	-	Long term roadworks at M6 J15
M6.2	385096	342012	54.5	30.2	28.2	25.7	28.5	46.5	29.9	53.5	26.7	48.2	29.6	26.8	35.7	31.1	-	Long term roadworks at M6 J15
E1	383166	329202	26.9	22.6	18.5	17.2	22.4	29.5	20.5	33.8	10.2	26.0	31.7	22.3	23.5	20.4	-	
M6 3	385076	342092	18.6	16.8	16.2	I/S	37.1	20.4	16.6	53.6	I/S	I/S	I/S	10.8	23.8	20.7	-	Long term roadworks at M6 J15
Weston	394408	323726	40.7	35.0	35.0	35.0	37.7	33.7	17.9	47.6	I/S	I/S	26.7	22.8	33.2	28.9	-	
M6.4	385054	341841	30.4	28.9	23.2	23.6	36.5	24.5	26.0	54.1	23.3	45.4	30.9	38.4	32.1	27.9	-	Long term roadworks at M6 J15

☒ **All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table B.1**

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

☐ **Local bias adjustment factor used**

☒ **National bias adjustment factor used**

☒ **Where applicable, data has been distance corrected for relevant exposure in the final column**

☒ Stafford Borough Council **confirm that all 2023 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System**

Notes:

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

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

See Appendix C for details on bias adjustment and annualisation.

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

New or Changed Sources Identified Within Stafford Borough Council During 2023

The M6 motorway runs through the Borough, 'smart motorway' upgrading was ongoing throughout this period with significant traffic impacts upon neighbouring roads as traffic diverted particularly during night -time closures.

The HS2a project was undergoing preparatory groundwork during 2023, this led to A and B road closures and traffic restrictions altering traffic flows.

There were summertime wild fires in neighbouring authorities and on the Cannock Chase SAC.

Additional Air Quality Works Undertaken by Stafford Borough Council During 2003

Stafford Borough Council has not completed any additional works within the reporting year of 2023.

QA/QC of Diffusion Tube Monitoring

Passive monitoring analysis was provided by Staffordshire County Council Highways Laboratory using 20% TEA in water method. All tubes were serviced in accordance with the 2023 diffusion tube monitoring calendar. The laboratory quality control results are given below.

Staffordshire County Council
Staffordshire Highways Laboratory

NO₂ diffusion tube analysis QC results – April 2024 Summary

AIR PT Scheme (LGC)

Results for each round are classified on z-scores for each tube as SATISFACTORY (≤2), QUESTIONABLE (between 2 and <3) and UNSATISFACTORY (>3).

For each round 2 sets of tubes are analysed by different members of staff to aid with QC and training.

PT Rounds during 2023
- Round 55 – Feb 2023. 100% satisfactory results.
- Round 56 – July 2023. 100% satisfactory results.
- Round 58 – Aug 2023. 100% satisfactory results.
- Round 59 – Oct 2023. 100% satisfactory results.

A summary of our z-score results can be found in the table below.

PT Round	Technician	z-scores	Performance
55 – Feb 2023	1	0.19, 0.00, -1.16, -1.45	100% SATISFACTORY
	2	-0.19, -1.31, -1.71, -1.73	
56 – July 2023	1	0.21, 0.11, 0.00, 0.30	100% SATISFACTORY
	2	-0.64, -0.16, -1.59, 0.15	
58 – Aug 2023	1	-0.12, -0.12, -0.19, -0.97	100% SATISFACTORY
	2	-0.37, -0.12, -0.86, -1.34	
59 – Oct 2023	1	0.42, 0.25, 0.34, 0.34	100% SATISFACTORY
	2	0.08, -0.59, -0.61, -0.14	

For more information on the AIR PT Scheme and older results see the Defra website: https://laqm.defra.gov.uk/air-quality/air-quality-assessment/qa-qc-framework/

Field Intercomparison (NPL)

Our performance for all results of 2023 received so far (Jan-Oct 2023) was classified as 'GOOD' (CoV <20). The chart below shows our results (blue squares), compared to the reference value (orange dots) for each month.

Diffusion Tube Annualisation

Annualisation was required at site M63 using the Diffusion Tube Data Processing Tool where some samples had been rejected due to contamination of the samples.

Table C.1 - Annualisation Summary (concentrations presented in µg/m³)

	J F	M	A	M	J	J	A	S	O	N	D	Annualisation
M63	18.6 16.8	16.2	I/S	37.1	20.4	16.6	53.6	I/S	I/S	I/S	10.8	**YES**

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.

Stafford Borough Council have applied a National bias adjustment factor of 0.87 to the 2023 monitoring data. A summary of bias adjustment factors used by Stafford Borough Council over the past five years is presented in Table C.2. The local bias adjustment factor cannot be calculated as no NO_2 monitoring is co-located with automatic monitoring sites as SBC does not conduct automatic monitoring.

Staffordshire Scientific Services Factor3 (11 studies)	20% TEA in water Use	2023 0.87	Overall Version 03/24 Sford

Table C.2 - Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2023	National (N)	03/24	0.87
2022	N	03/23	0.87
2021	N	03/22	0.86
2020	N	03/21	0.85
2019	N	03/20	0.93

Table C.3 - Local Bias Adjustment Calculation

Not undertaken

Notes:

A single local bias adjustment factor has been used to bias adjust the 2023 diffusion tube results.

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 has been estimated using the Diffusion Tube Data Processing Tool/NO$_2$ fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO$_2$ concentrations corrected for distance are presented in Table B.1.
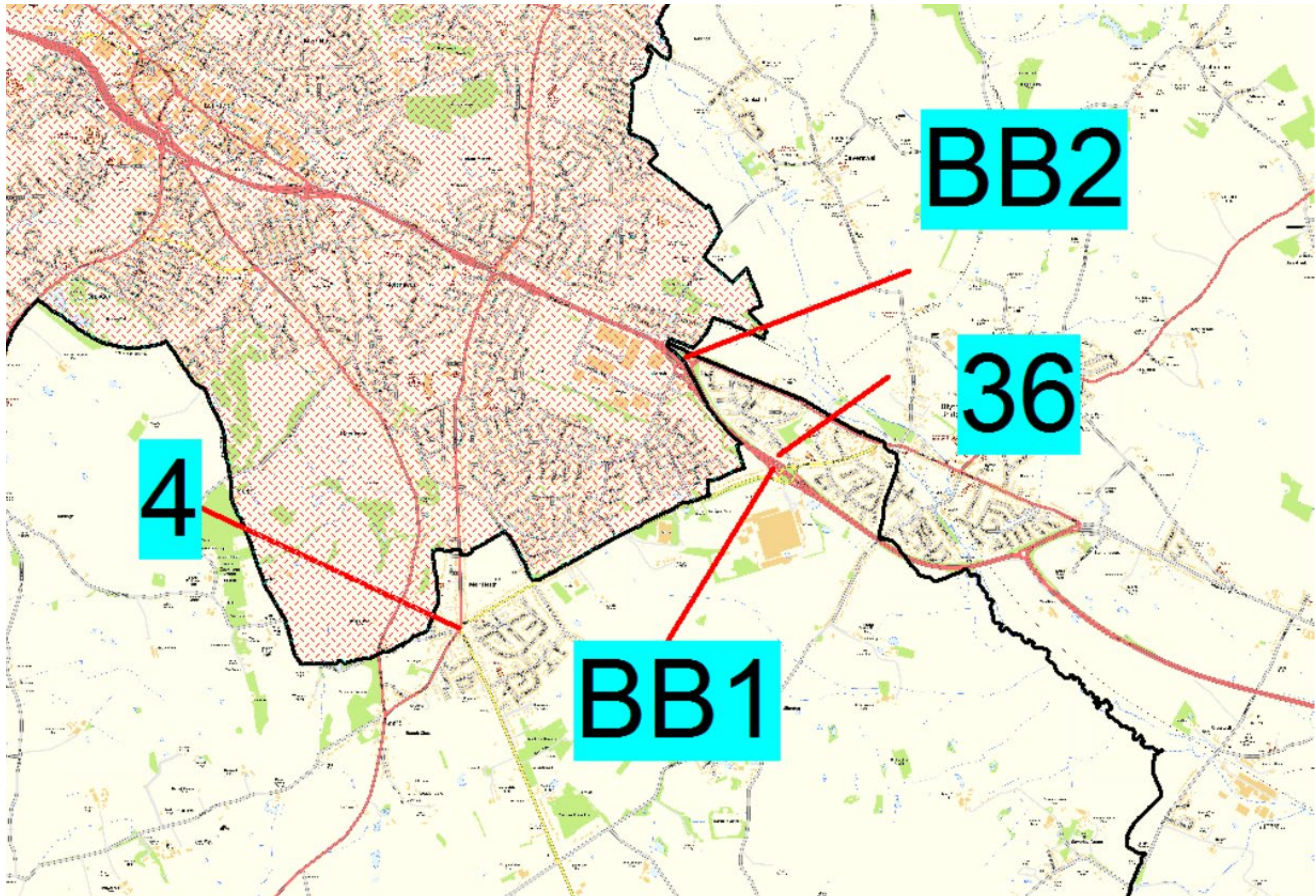
No Fall off with Distance adjustments were required in Stafford Borough Council in 2023.
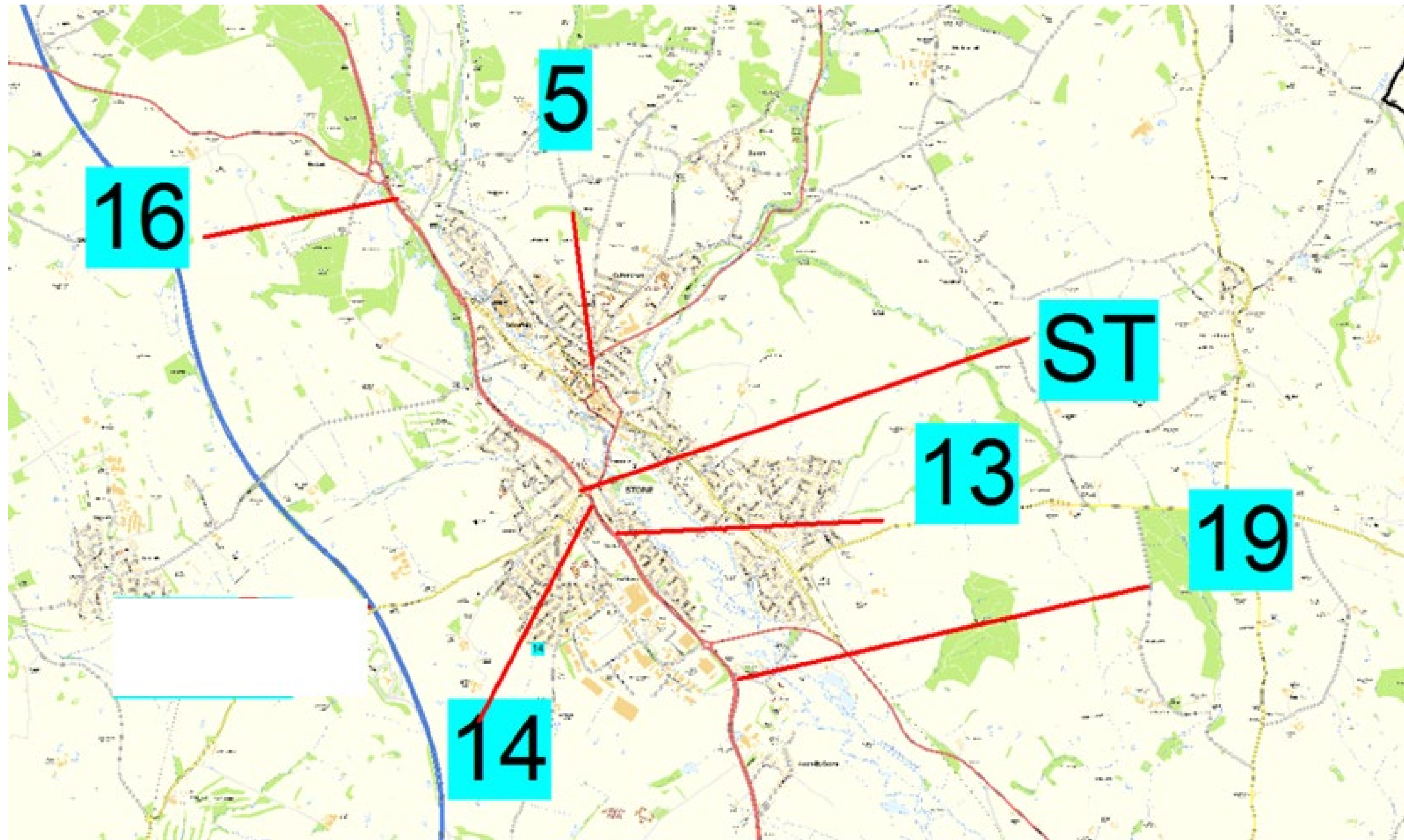
Appendix D: Map(s) of Monitoring Locations and AQMAs
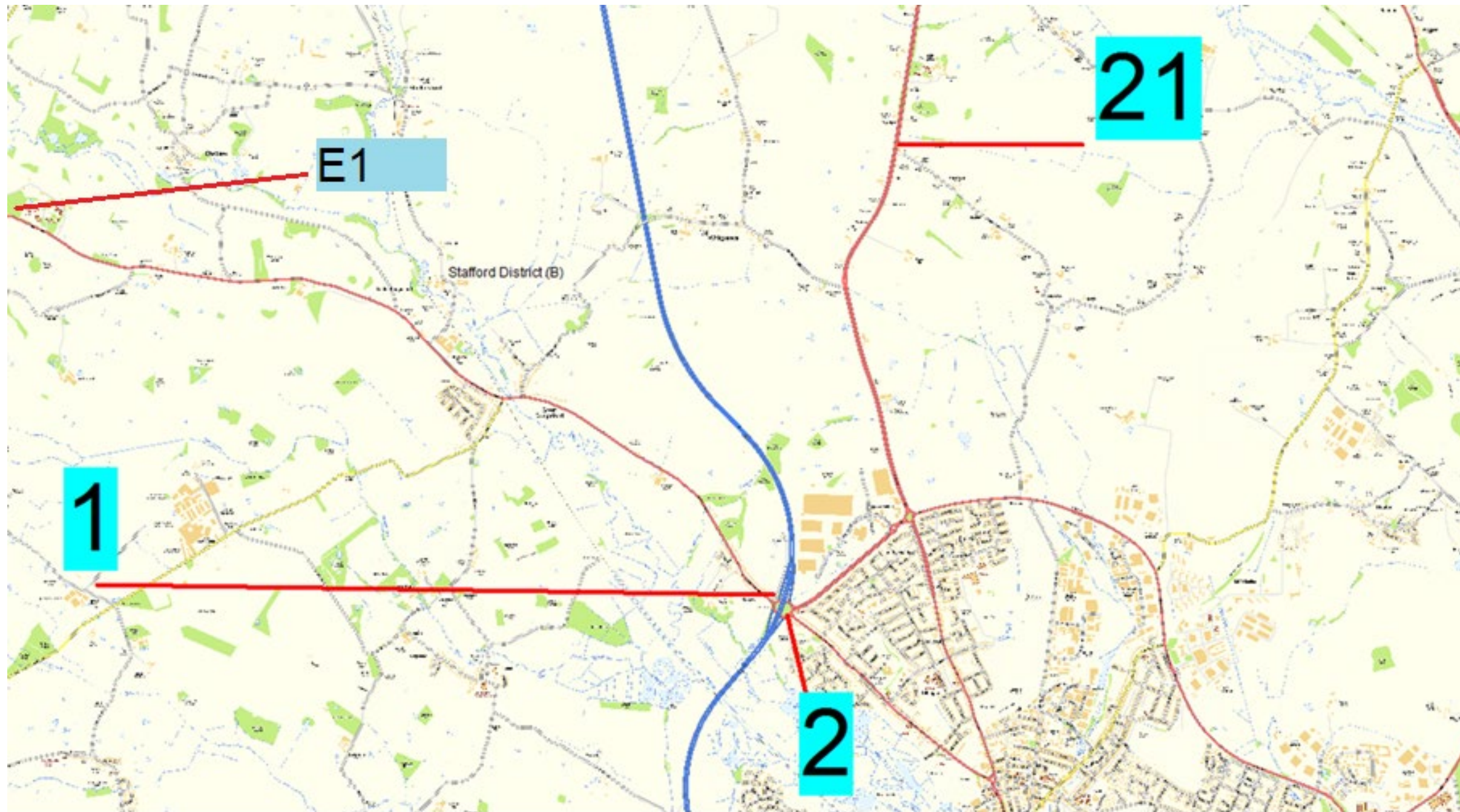
Figure D.1 - Maps of Non-Automatic Monitoring Sites
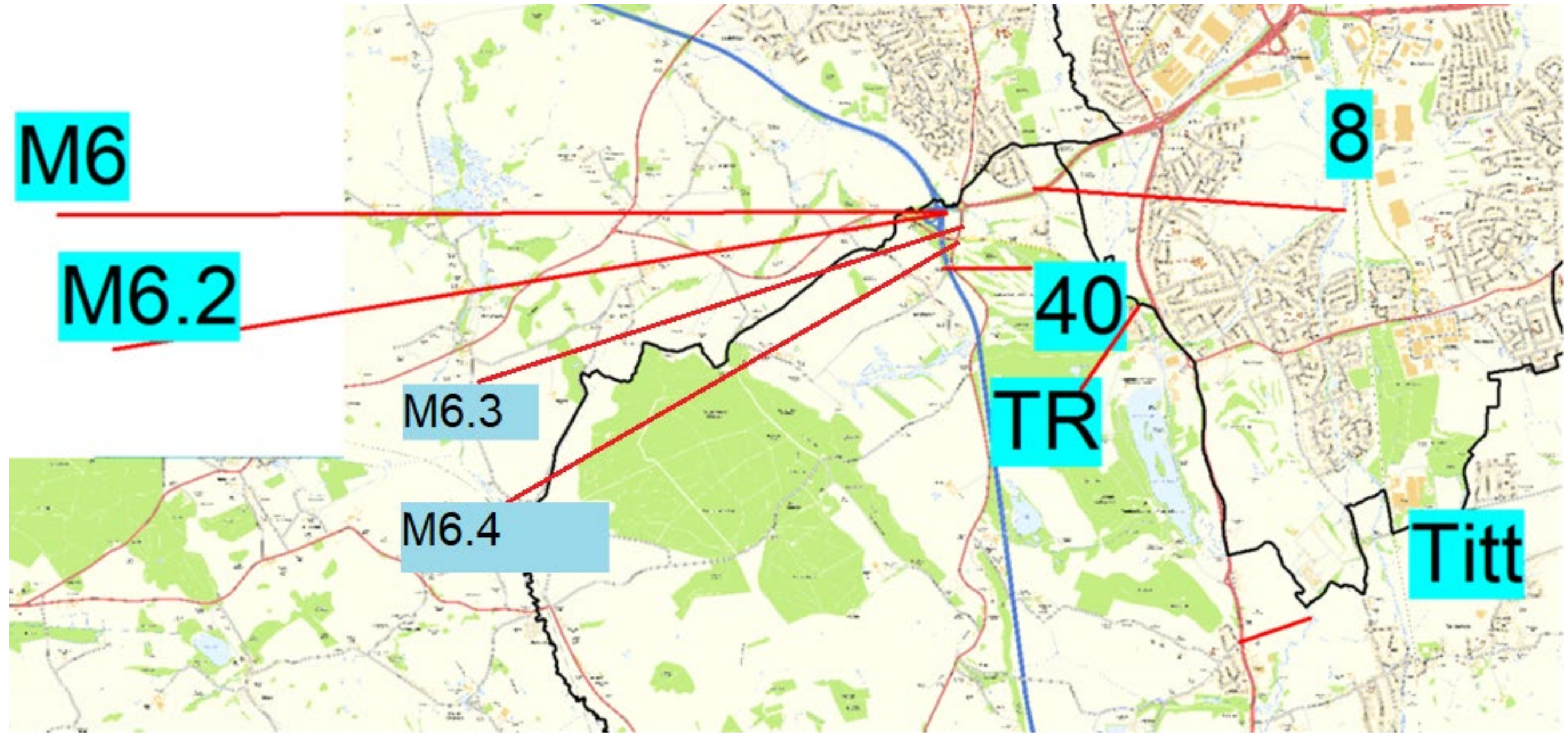
Borough North (Stoke on Trent and Newcastle u Lyme Boundary)
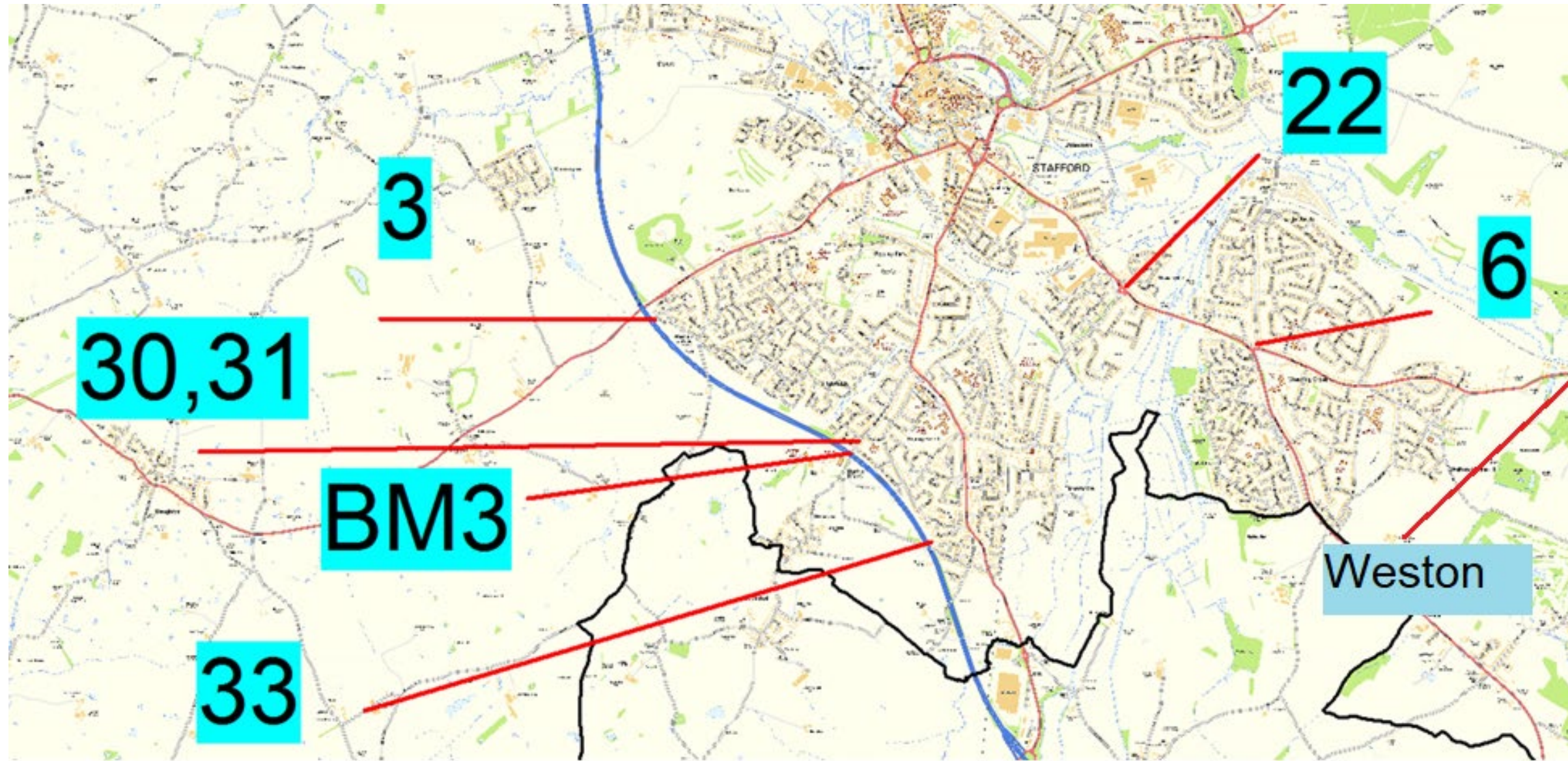
BB2

36

4

BB1

Borough East (Stoke on Trent Boundary)

Stone area

Stafford North

Stafford South and (Cannock Chase DC Boundary)

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England[7]

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

---

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

Appendix F: Draft Air Quality Strategy

Air Quality Strategy for Stafford Borough

2024-2026

Contents

1   Cabinet Member Foreword

Residents, businesses and visitors to Stafford Borough all enjoy the extensive areas of green open space and unspoilt countryside, and this includes our good air quality.

In order to ensure that the good quality of the air that we breathe in our towns and villages continues, we need to ensure effective monitoring of air quality and also to plan ahead. Improvements to air quality can be slow to deliver so actions need to take place now so that we can all benefit.

Stafford Borough is in a period of growth which although has many benefits could also threaten the quality of the air that we breathe. The increasing dependence we all have upon motor vehicles, whether for pleasure or business and transportation of goods creates the issues associated with transport related pollution. The challenge is to secure the benefits of economic growth whilst minimising the health problems caused by this pollution.

This strategy recognises that no one single agency, department or community has all the answers; improvements to air quality can only be achieved by taking an integrated, collaborative approach. It acknowledges that economic growth and improving the local environment are not mutually exclusive.

The document provides an overview of air quality across Stafford Borough and focuses on key areas where air quality could and should be improved.

I am delighted to commend this strategy as a key step towards tackling our areas of traffic related pollution to safeguard the health of those who live, work or visit Stafford Borough.

2   Endorsement from The Director of Public Health

3   Executive Summary

The Council is committed to making the Borough a great place to live and work and recognises that good air quality is an essential part of achieving this.

This strategy sets out how Stafford Borough Council will continue to work towards maintaining good air quality across the Borough. it will inform the decision-making processes around significant infrastructure projects such as The Stafford Gateway, large housing developments, key transport infrastructure including facilitating

Electric vehicle use and town centre redevelopments. It will satisfy the Statutory requirements of National Air Quality Reporting.

Background

Stafford Borough is semi-rural in nature and the air quality complies with the EU standards throughout the Borough. This is evidenced each year via the monitoring and statutory reporting to National Government.

Our local air quality is being challenged because the Borough population is growing and because it lies between the large conurbations of Stoke on Trent, Manchester and Birmingham with major transport links such as the M6 motorway, A50, A500 and the A34.

All Council service areas consider air quality issues within the Council's Climate Change Group. The group works with partners, neighbouring authorities and government agencies when considering air quality issues and improvements.

Environmental Health Officers consider Air Quality issues in conjunction with the County Council, Public Health Practitioners, Highways England and regional groups via the Staffordshire Chief Officers Air Quality Group quarterly meetings.

Community involvement and cohesion is the key to the future success of the strategy and collaborative working with such groups will build sustainable local solutions.

In summary, the Council will:

- Consult with partners and stakeholders regarding air quality.

- Consider all the options available to reduce pollutants.

- Use both regulatory and non-regulatory powers to improve air quality.

- Consider the wider economic, social and environmental air quality impacts of new developments.

- Annually produce an Air Quality Report as required by statute.

- Produce an Air Quality Action Plan when required

By implementing this air quality strategy, Stafford Borough Council can effectively address air pollution challenges, protect public health, enhance environmental quality, and promote sustainable development for the benefit of current and future generations.

4   Introduction

4.1   Air Quality Vision

To maintain and promote good air quality in the Borough for all and to ensure a healthy outdoor air environment for the future.

This strategy highlights key factors influencing air quality in the borough, including traffic emissions, industrial activities, residential power, and natural sources, it sets out the aims and objectives as to how the Council will continue to work towards improving air quality in the Borough by:

- Adopting a corporate approach.

- Engaging with communities to promote inclusive sustainable solutions.

- Considering all the options available.

- Using both regulatory and non-regulatory powers.

- Considering the wider economic, social and environmental impacts.

4.2   Effects of Poor Air Quality on Health

Air pollution is the biggest environmental threat to health in the UK, with between 28,000 and 36,000 deaths a year attributed to long-term exposure (PHE 2019).

Air pollution is proven to be associated with adverse health impacts. It is recognised as being a contributing factor to the onset of heart disease and cancer.

Air pollution particularly affects the most vulnerable in society, children and older people and those with existing heart and lung conditions. There is also often a strong correlation with equalities issues, as areas with poor air quality are also often the less affluent areas.

Air quality is an important consideration for our communities when people choose where to live, study and work. Good air quality is linked to the choices for schooling, training, the workplace environment and housing.

4.3   Air Pollution Sources in Stafford Borough

The Stafford Borough Council area does not have any Air Quality Management Areas (AQMA's) but is still affected by air pollution.

The main roads in the Borough such as the M6 motorway A50, A500 and A34 all generate significant traffic pollution in the form of nitrous oxides and particulate matter. The traffic hotspots for nitrogen dioxide concentrations are continuously monitored by diffusion tubes around the M6 junctions and trunk roads. Monitoring evidence presented in the graph below reveals that the pollutants arising from traffic on these routes is not increasing year on year.

Industrial sources of air pollution, in particular combustion activities, are regulated by the Local Authority or the Environment Agency, no industrial sources have been found to be likely to cause a breach of the local air quality standards.

Air pollution also seasonally arises from agriculture dusts and natural sources such as pollen and the vaporisation of plant oils, this form is pollution is currently poorly understood and managed.

4.4   Future Air Quality Challenges

Stafford Borough Council is undergoing a time of considerable housing growth and commercial investment including the accommodation of military personnel and potentially a new HS2 rail link station. The local traffic that this growth will generate is estimated to be up to 2000 additional vehicle movements per day and needs to be properly considered so that the burden of extra vehicles does not result in a significant deterioration of the local air quality. All planning applications for new housing receptors are assessed for the air quality impacts and it remains an air quality planning priority.   The protection of the Cannock Chase Special Area of Conservation from air pollution is a statutory requirement.

Stafford Borough Council does not have an Air Quality Management area, however it remains important that improvements to air quality are pursued wherever possible particularly through planning design. Stafford Borough Council has important regional motorway and trunk routes and as a result is keen to pursue opportunities that will improve transboundary pollution levels.

In partnership with Staffordshire County Council, work to provide public electric vehicle charging points is underway. Local taxi charging points have already been established to drive changes within the taxi fleet.

The development of sustainable transport links to enhance cycling and walking options throughout communities as well as the promotion of the healthy enjoyment of our open spaces will remain important considerations.

4.5   A Mandate for Air Quality Management

The Council is committed to making Stafford a great place to live, study and work and recognises that clean air is an essential part of achieving this. Air Quality is currently good in our area and there is no statutory need for an Air Quality Management Area, it is however important that air quality issues are formally proactively addressed to preserve these benefits.

5   Legislative Background

5.1   Clean Air Acts of 1956, 1968 and 1993

During the 1950s national government decided that action was needed to drastically reduce the number of deaths resulting from smog (a combination of smoke and fog). The government introduced legislation to reduce the amount of smoke produced from industrial and domestic properties, by introducing the Clean Air Acts 1956 and 1968.

These Acts, together with other associated clean air legislation, were repealed and consolidated by the Clean Air Act 1993 which, together with regulations and Orders made under the Act, provide the current legislative controls. Control of smoke emissions may also help reduce emission of a wide range of other pollutants such as particles, sulphur dioxide, polycyclic aromatic hydrocarbons (PAH) and polycyclic dioxins and difurans (PCDD/F) all of which may be present in smoke.

The Acts included the provision to make 'smoke control areas' where this was shown to be necessary to mitigate the effects of solid fuel burning, importantly, this provision was not necessary to adopt in the Stafford Borough area.

5.2   Environment Act 1995

While the Clean Air Acts focused on emission sources, the Environment Act has a different approach by setting standards or targets for specific pollutants in air.

The Environment Act 1995-part IV section 80 requires the Secretary of State to prepare and publish a National Air Quality Strategy containing policies with respect to the assessment or management of air quality and include statements with respect to:

- Standards relating to the quality of air.

- Objectives for the restriction of the levels at which particular substances are present in the air; and measures which are to be taken by local authorities and other persons for the purpose of achieving those objectives.

- Section 82 of the Act requires each local authority to review air quality in its area from time to time and to report both current and likely future air quality.

- Section 83 requires local authorities to designate an Air Quality Management Area (AQMA) where air quality objectives are not being achieved.

- Section 84 requires local authorities who have declared an AQMA to prepare an Air Quality Action Plan (AQAP) which sets out what actions it will take to work toward achieving air quality standards and objectives in the designated area.

Each year, the Council prepares and submits for scrutiny its strategy and evidence in the form of an ASR (Air Quality Annual Status Report), importantly, the local air quality standards both historically and currently are met and so no declaration of an AQMA has been made in our Borough.

5.3 UK Air Quality Strategy

The current Air Quality Strategy for England, Scotland, Wales and Northern Ireland sets out air quality objectives and policy options to further improve air quality in the UK now and into the future. The strategy sets out a way forward for work and planning in air quality issues. It details the standards and objectives to be attained for various pollutants and suggests measures to be considered to help achieve them. The air quality strategy for England - GOV.UK (www.gov.uk)

6 Working Together to Improve Air Quality

6.1 Staffordshire Air Quality Forum (SAQF)

Stafford Borough Council is a member of the Staffordshire Air Quality Forum (SAQF) which includes representatives of all of the Staffordshire Local Authorities including Staffordshire County Council and National bodies such as Highways England, the Environment Agency and Public Health England. Partnering with these organisations ensures that changes to existing conditions such as cross boundary air quality management strategies, new or altered routes, new technology and public advice in Stafford Borough is current and meaningful.

6.2 **Climate Change Action Group**

There is a synergy between climate change actions and air quality management, many of the resources to deliver improvements are common to both. Contributions to each area are shared through joint memberships of the SAQF and local climate change groups.

6.3 **Council Partners and Neighbouring Authorities**

Stafford Borough Council will continue to work with partners and neighbouring authorities to:

- Ensure that actions taken by the council do not result in significant worsening of air quality in our own or neighbouring authorities.

- Consider the joint benefit for communities, partners and neighbouring authorities of actions that are proposed to improve air quality.

- Aim to ensure relative contributions to a solution that are cost-effective and proportionate for partners and neighbouring authorities.

- To contribute to and support Staffordshire County Council in the provision of new public electric vehicle charging points.

7 **Local Air Quality Management (LAQM)**

7.1 **Review and Assessment**

The Council began the process of LAQM in 1998, by assessing which pollutants were most likely to be of concern and which pollutants could be "screened out" because sources of those pollutants were not present in the Borough.

Once it had been established which pollutants needed to be monitored to assess whether national objectives were being met, monitoring was and continues to be carried out in accordance with guidance from the Department for the Environment, Food and Rural Affairs (Defra).

If a situation arises where air quality does not meet the objectives set in the Air Quality (England) Regulations, an Air Quality Management Area (AQMA) is declared. The Air Quality Action Plan (AQAP) becomes the mechanism for improving the local air quality and the plan forms the statutory element of the local air quality management process. Once an AQMA has been declared there is a statutory duty for the local authority to produce an AQAP to pursue achievement of the relevant air quality objective(s).

The main pollutant of concern in Stafford Borough is nitrogen dioxide (NO_2). Nitrogen dioxide is mostly associated with emissions from road vehicles. Nitrogen oxides are formed at high temperature during combustion processes from the oxidation of nitrogen in the air and any nitrogenous components of the fuel or other material being burned. NO_2 is an irritant gas that can aggravate the respiratory system through inflammation of lung tissue and the airways. The groups of people most vulnerable to these effects are young children, the elderly and asthmatics.

Airborne particulate matter pollution is now attracting further research with regard to significant health impact risks, currently the requirement to monitor for this pollutant is not triggered in the Stafford Borough area, however it is likely that new guidance will require further local investigations.

The council have undertaken all stages of the LAQM process and published results which are available on the authority's website as the ASR. https://www.staffordbc.gov.uk/current-air-quality-annual-status-report

7.2   **Air Quality Action Plans**

An Air Quality Action Plan (AQAP) must be published for each Air Quality Management Area (AQMA) declared in the borough and will be subject to an annual review process. Currently Stafford Borough has not breached the Air Quality Standards and therefore has no AQMA's.

Where necessary an AQAP details: -

- The pollutants to be reduced.

- An indication of the source of each pollutant.

- What the Council and other agencies will do to reduce the pollutant.

- The emission reductions expected, including concentration, if possible.

- The timescale for implementing each proposal.

Whilst AQAPs contain specific actions, it is recognised that some of the success in improving air quality involves lifestyle changes and personal commitment to live, work and travel in different ways. There is on-going support for the principles to encourage less car usage, reduce congestion, promote walking, cycling and the use of public transport.

It is a requirement of the action planning process to regularly review and report progress and achievements to the Department for Environment, Food and Rural Affairs (Defra).

8   Monitoring and Evaluation

Stafford Borough Council will continue to operate an air quality monitoring regime and fulfil Defra's reporting requirements. The council will publish copies of approved reports on-line. Environmental and Health Services will take the lead in managing local air quality and will continue to work with colleagues in other council departments, partner agencies, communities and neighbouring authorities, with the overall aim of improving air quality.

END

Table 2.1 – Actions being taken within Staffordshire to reduce PM2.5

Measures category	Measure Classification	Effect on reducing NOx and PM10 emissions (low, medium, high)	Reduces PM2.5 emissions	Local Authority							
				Staffordshire Moorlands DC	Newcastle under Lyme BC	Cannock Chase	Stafford BC	East Staffs BC	Lichfield DC	South Staffs DC	Tamworth BC
Traffic Management	Urban Traffic Control systems, Congestion management, traffic reduction	low	☐	UTC in Leek Town Centre	UTC in areas of Newcastle Town Centre AQMA and Kidsgrove AQMA. Live labs monitoring work linked to congestion in Newcastle.		UTC in Stafford Town Centre	Town Centre Regeneration Programme & a number of schemes are currently being progressed which will aid traffic management. Many of these will help improve traffic flow within the AQMA. Live labs monitoring work linked to congestion in Burton.	Liaising with Midlands Connect to increase usage of M6 Toll to reduce congestion on A5 & lobbying for upgrade of A38 & A5. The A5 corridor priority for congestion control, but the central section outside of LDC has been prioritised for transport intervention measures. Consideration of Junction improvements at Muckley Corner.		UTC in Tamworth Town Centre at Ventura Park
	Reduction of speed limits, 20mph zones	low	☐	20mph zones near some schools in residential areas			20mph zones near some schools in residential areas	20 mph zones near some schools in residential areas	.	20mph zones in Trysull, Bradley, Kinver and Bilbrook	
	Road User Charging (RUC)/ Congestion charging	low	☐	No					M6 Toll	M6 Toll	
	Anti-idling enforcement	low	☐	Campaign only Air Aware project	Campaign only Air Aware project			Campaign only Air Aware project	Campaign only Air Aware project	Campaign only Air Aware project.	Campaign only Air Aware project
	Other		☐								
Promoting Travel Alternatives	Workplace Travel Planning	low	☐	No workplace travel planning currently.							
	Encourage / Facilitate home-working	low	☐	Agile working policy applied	Homeworking Policy adopted		Homeworking Policy adopted	Homeworking Policy adopted	Homeworking policy adopted	Agile working policy adopted	Homeworking policy adopted
	School Travel Plans	low	☐	https://www.staffordshire.gov.uk/activeschooltravel							
	Promotion of cycling	low	☐	www.staffordshire.gov.uk/Transport/Transport-Planning/Walking-and-cycling.aspx Review of LCWIP will include additional areas such as Biddulph and Rugeley INTO Walking and Cycling Social Prescribing Specific to Newcastle-under-Lyme www.staffordshire.gov.uk/walkingandcycling							Same as other Staffs authorities
	Promotion of walking	low	☐	www.staffordshire.gov.uk/Transport/Transport-Planning/Walking-and-cycling.aspx Review of LCWIP will include additional areas such as Biddulph and Rugeley INTO Walking and Cycling Social Prescribing Specific to Newcastle-under-Lyme www.staffordshire.gov.uk/walkingandcycling						Good Life Health & Wellbeing in the Community	Same as other Staffs authorities
	Staffordshire Share a Lift Scheme		☐	No Car Share Scheme currently.							
	Promote use of rail and inland waterways	medium	☐	North Staffordshire Community Rail Partnership operating along the North Staffordshire Line includes Blythe Bridge station.	North Staffordshire Community Rail Partnership operating along the North Staffordshire Line includes Kidsgrove station. Kidsgrove station to be fully accessible and regenerated through Town Deal.		Redevelopment of Stafford Station into a gateway associated with HS2 works.	Burton Forecourt improvements completed 2021.	Lichfield Trent Valley access for all works recently completed including lifts.	Improved access/ park facilities at Codsall Station. Upgrades and Landywood Station Brinsford Park and Ride - Parkway Station business case ongoing	
Transport Planning & Infrastructure	Local Transport Plans and District Strategies	high	☐	www.staffordshire.gov.uk/Transport/Transport-Planning/District-integrated-transport-strategies.aspx							

Measures category	Measure Classification	Effect on reducing NOx and PM10 emissions (low, medium, high)	Reduces PM2.5 emissions	Local Authority							
				Staffordshire Moorlands DC	Newcastle under Lyme BC	Cannock Chase	Stafford BC	East Staffs BC	Lichfield DC	South Staffs DC	Tamworth BC
	Public transport improvements-interchanges stations and services	low	▢	Proposed reinstatement of Leek rail connection. Planning application approved during 2022. Funding being sought from central government	Kidsgrove will be multi-modal through Town Deal funding.		New services with S106 funding provided in Stone to new estates in Walton and Yarnfield. Stafford Gateway will be multi- modal		Lichfield Bus Station resurfaced, repainted & new coach parking bays provided. Alternative location for bus station currently under consideration	Parkway station will be multi- modal	Planned improvements at Tamworth station
	Public cycle hire scheme	low	▢				e-scooter trials NOW ENDED AWAITING CONCLUSIONS				
	Cycle network	low	▢	www.staffordshire.gov.uk/Transport/Transport-Planning/Walking-and-cycling.aspx Staffordshire cycle maps currently awaiting audit and review							
	Bus route improvements	high	▢	Review of Integrated Transport Strategy will include consideration of improvements for public transport	RTPI on key routes in Newcastle Town Centre. Improved future bus services to Chatterley Valley		Improved bus priority and interchange on key routes in Stafford post-SWAR	Improvements in Burton town centre	RTPI introduced at key stops in Lichfield City.	Consideration of future bus stop upgrades on key routes & improvements to rural services	Corporation Street interchange improvements planned discussion ongoing with SCC
	Active Travel Fund	low	▢		ATF 2 measures to encourage walking and cycling		ATF 2 measures to encourage walking and cycling	ATF 2 and 4 measures to encourage walking and cycling			ATF 3 and 4 measures to encourage walking and cycling
	Levelling Up Fund 2	medium	▢		Schemes will improve a number of major roads around the county, reduce journey times, put greener, cleaner buses on main roads, improve walking and cycling routes and reduce the impact of housing and commercial developments. They will benefit East Staffordshire, Cannock Chase and Stafford Borough. Total package cost circa £20m. • Circa £6 million at the A38/A5121 Branston Interchange, near Burton, to complete the work at junction and open up for large scale housing and business development. Staffordshire County Council is adding additional money to walking and cycling schemes in the area for non-motorists to cross the A38 safely. • More than £9 million for work at either end of the A34 between Cannock and Stafford. In Cannock there will be walking and cycling routes to complement the planned town centre regeneration and link to the train station. In Stafford there will be the creation and maintenance of walking and cycling routes along from Radford Bank to the town centre. • Approximately £4.2 million to introduce either the latest generation Euro VI diesels, or electric-powered buses on certain busy routes, as well as improving bus stops and changing priority at junctions. Bus routes benefiting from the new investment include the #8 and #9 services in Burton, run by Midland Classic; the #74 between Stafford and Cannock, run by Chaserider; and the #875 from Stafford to Cannock, via Penkridge, run by Select Buses.						
Alternatives to private vehicle use	Bus based Park & Ride	medium	▢						New bus central station as part of Friarsgate development scheme		
	Car Clubs	low	▢	▢							
Policy Guidance and Development Control	Planning applications to require assessment of exposure / emissions for development requiring air	high	▢	www.staffsmoorlands.gov.uk/media/6155/Adopted-Local-Plan/pdf/Adopted_Local_Plan.pdf?m=1601645140880	Included as part of Local Validation List www.newcastle-staffs.gov.uk/planning-applications/information-requirements-validation-planning-applications				www.lichfielddc.gov.uk/homepage/95/planning-policy	www.sstaffs.gov.uk/planning/planning-policy/adopted-south-staffordshire-local-plan	

Measures category	Measure Classification	Effect on reducing NOx and PM10 emissions (low, medium, high)	Reduces PM2.5 emissions	Local Authority							
				Staffordshire Moorlands DC	Newcastle under Lyme BC	Cannock Chase	Stafford BC	East Staffs BC	Lichfield DC	South Staffs DC	Tamworth BC
	quality impact assessment										
	Air Quality Strategy				Revised Air Quality Action Plan due in 2024 will include requirements for PM$_{2.5}$		2019-2023 Air Quality Strategy 2024-26 Drafted			In development	
	Planning Guidance for developers		⬜	SMDC "Air Quality and Emissions Mitigation" Guidance for Developers available, and currently being updated with view to be adopted as a official SPD	To be developed alongside New Local Plan www.newcastle-staffs.gov.uk/planning-policy/local-plan			Informal guidance in place		www.sstaffs.gov.uk/planning/planning-policy/planning-guidance-and-spds	www.tamworth.gov.uk/sites/default/files/planning_docs/Tamworth_Design_SPD_July_2019_v1-0.pdf
	Developer Contributions based on damage cost calculation		⬜	Damage cost assessment has been used for applicable applications.	To be considered as above			Damage cost assessment now required for applicable applications.			
	Planning Policies		⬜	www.staffsmoorlands.gov.uk/media/6155/Adopted-Local-Plan/pdf/Adopted_Local_Plan.pdf?m=1601645140880	Various policies support alternatives to use of car and increased use of public transport www.newcastle-staffs.gov.uk/downloads/file/191/saved-policies-of-the-newcastle-under-lyme-local-plan		http://www.staffordbc.gov.uk/planning/planning-policy/local-plan-2012-2031	Supplementary planning document in development	www.lichfielddc.gov.uk/Council/Planning/The-local-plan-and-planning-policy/Planning-policy.aspx	www.sstaffs.gov.uk/planning/planning-policy/planning-guidance-and-spds	
	STOR Sites (Short Term Operating Reserve) Energy Generation . Regulation via planning / permitting regime	high	⬜	⬜							
	Low Emissions Strategy	high	⬜	Forms part of Climate change action plan &	In development						

Measures category	Measure Classification	Effect on reducing NOx and PM10 emissions (low, medium, high)	Reduces PM2.5 emissions	Local Authority							
				Staffordshire Moorlands DC	Newcastle under Lyme BC	Cannock Chase	Stafford BC	East Staffs BC	Lichfield DC	South Staffs DC	Tamworth BC
				Climate change action plan part 2							
Freight and Delivery Management	Freight Consolidation Centre	medium	▯	X							
	Route Management Plans/ Strategic routing strategy for HGV's	high	▯	www.staffordshire.gov.uk/Transport/Transport-Planning/Local-transport-plan/Home.aspx This should be considered as part of planning applications where new proposals come forward.							
	Quiet & out of hours delivery	low	▯								
	Delivery and Service plans	medium	▯								
	Freight Partnerships for city centre deliveries	high	▯								
Vehicle Fleet Efficiency	Driver training and ECO driving aids	medium	▯	▯							
	Promoting low emission public transport	high	▯	X							
	Vehicle retrofitting programmes	medium	▯	On going / in development Energy Saving Trust (EST) have reviewed current fleet and issued recommendations including training.		Bus retrofit for vehicles using A53 service 4	Incorporation of emissions enhancements on waste fleet		Retrofitting of old Council owned HGVs and Buses with pollution abatement equipment will be considered by the Council where technically and financially feasible		
	Fleet efficiency & recognition schemes	medium	▯	Staffordshire County Council's Climate Change Action Plan www.staffordshire.gov.uk/environment/Documents/Climate-Change-Action-Plan.pdf - Where possible consider and implement a transition plan to full EV vehicles within the SCC fleet							
Promoting low emission transport	Low emission zone (LEZ) Clean Air Zone (CAZ)	high	▯	X							
	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	high	▯	Procurement Strategy in development; Climate change action plan			Waste fleet vehicles comply with Euro VI.			Council new vehicles all comply with Euro 6	
	Company Vehicle Procurement - Prioritising uptake of low emission vehicles	high	▯	Energy Saving Trust have reviewed current fleet and issued draft The majority comply with are highest EURO emission standard tween with			Investigating replacing old vehicles within the fleet with more modern cleaner vehicles, which comply with prevailing EURO standard. This will be extended to all Councill owned vehicles.		Vehicles replaced (in addition to normal fleet turnover)	Most council vehicles were replaced last year with new cleaner vehicles	

Measures category	Measure Classification	Effect on reducing NOx and PM10 emissions (low, medium, high)	Reduces PM2.5 emissions	Local Authority							
				Staffordshire Moorlands DC	Newcastle under Lyme BC	Cannock Chase	Stafford BC	East Staffs BC	Lichfield DC	South Staffs DC	Tamworth BC
				the rest completed by 2023							
	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	high	▢	[EV strategy](#) on council car parks. hydrated vegetable oil are currently being used by waste fleet	Newcastle towns deal includes EV charging infrastructure.		Procurement of EV on staff carparks partially completed.	EV infrastructure procures on E Staffs public car parks & being installed in 2023		EV Parking on staff car parks	
	Priority parking for LEV's	high	▢	▢					LiDC reviewing its car park strategy for the District in pursuit of increasing the provision of EV charging Infrastructure.		EV charging spaces being investigated.
	Taxi Licensing conditions	medium	▢	In development			Scheduled to promote EV				
	Taxi emission incentives	medium	▢	In development							
	EV Strategy	high	▢	[democracy.staffsmoorlands.gov.uk/documents/s32243/SM-Public-EV-Charging-Strategy-V1_Final_15.09.22.pdf](#)	Staffordshire EV Charging Infrastructure Strategy [www.staffordshire.gov.uk/Transport/Sustainable-travel/Electric-vehicles/02-SCC-Public-EV-Charging-Strategy-V3-3.pdf](#)						
Environmental permits	**Introduction/increase of environment charges through permit systems and economic instruments (Permit fees set centrally)**	medium	▢	▢					On going Environmental Permits inspection of installation adhering to permits and enforcement/penalties for breaches		
	Measures to reduce pollution through IPPC Permits going beyond BAT	medium	▢								
	Large Combustion Plant Permits and National Plans going beyond BAT	high	▢				NA				
	Other		▢								

Measures category	Measure Classification	Effect on reducing NOx and PM10 emissions (low, medium, high)	Reduces PM2.5 emissions	Local Authority							
				Staffordshire Moorlands DC	Newcastle under Lyme BC	Cannock Chase	Stafford BC	East Staffs BC	Lichfield DC	South Staffs DC	Tamworth BC
Other measures	Smoky Diesel Hotline		☐	www.gov.uk/report-smoky-vehicle							
	A5 and M6 Partnership		☐						Strategy for the A5 2011-2026	Strategy for the A5 2011-2026	
	Domestic Smoke Control advice and Enforcement		☐	SMDC Smoke Control	-		www.staffordbc.gov.uk/pollution-air		www.lichfielddc.gov.uk/home-garden/bonfires-barbecues-smoke/1	www.sstaffs.gov.uk/environment-and-climate/environment-health-and-nuisance/smoke-control-areas)	Drafting of fines policy for issue of persistent dark smoke from domestic chimneys.
	Garden Bonfires - Advice and nuisance enforcement		☐	SMDC Smoke Nuisance and Bonfires	-		www.staffordbc.gov.uk/pollution-air		www.lichfielddc.gov.uk/home-garden/bonfires-barbecues-smoke/1	www.sstaffs.gov.uk/environment-and-climate/environment-health-and-nuisance/smoke-control-areas	http://www.tamworth.gov.uk/air-quality
	Commercial burning advice and enforcement		☐	SMDC Commercial smoke & waste management "its a burning issue" EA leaflet	-		www.staffordbc.gov.uk/pollution-air		www.lichfielddc.gov.uk/home-garden/bonfires-barbecues-smoke/1	www.sstaffs.gov.uk/environment-and-climate/environment-health-and-nuisance/smoke-control-areas	http://www.tamworth.gov.uk/air-quality
	Multi agency working with Fire Service and Environment Agency for trade burning				-			Information shared as appropriate	Information shared as appropriate	Information shared as appropriate	Information shared as appropriate
	Multi agency working with Staffordshire Fire Service & Local Authority Building Control regarding chimney fires and complaints about DIY domestic heating systems				-			Information shared as appropriate	Information shared as appropriate	Information shared as appropriate	Information shared as appropriate
	Stoke-on-Trent Low Carbon District Heat Network		☐	-	-			Information shared as appropriate.			

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	Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by National Highways
EU	European Union
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
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

References

- Local Air Quality Management Technical Guidance LAQM.TG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.

- 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.

- Chemical hazards and poisons report: Issue 28. June 2022. Published by UK Health Security Agency

- Air Quality Strategy – Framework for Local Authority Delivery. August 2023. Published by Defra.