



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: 28th June 2024

Endorsement from the Director of Health & Care Staffordshire County Council Annual Status Report(ASR) Air Quality

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 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 NO₂ 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 PM_{2.5}, 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 PM_{2.5} within the County.

Post Covid the Staffordshire Air Quality Forum has recommenced 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

A handwritten signature in black ink, appearing to read 'Richard Harling', written in a cursive style.

**Director of Health and Care
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[June 2024]

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Executive Summary: Air Quality in Our Area

Air Quality in Tamworth Borough Council

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 year¹.

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 pollution².

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.

In the Tamworth Borough Council area, the main pollutant of concern is nitrogen dioxide which is emitted as a product of combustion from heating sources and especially road vehicles. It follows that the areas of greatest interest in terms of air quality are dwellings close to busy roads or busy junctions, particularly where these are prone to congestion or where the streets are narrow and the houses are close to the carriageway and residential areas close to point sources of combustion such as chimneys serving large boiler plant.

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

Since 2006 monitoring undertaken by the Council had identified one particular busy junction (the Two Gates crossroads, Dosthill) was showing concentrations of nitrogen dioxide that were very close to the Air Quality Objective for nitrogen dioxide, the monitoring intensified and in 2011 it was concluded that certain properties located close to this crossroads were at risk of exceeding the annual mean air quality objective for nitrogen dioxide. In 2012 consultants (Ricardo-AEA) undertook a detailed assessment that involved modelling the pollution concentrations. As a result, the council declared an Air Quality Management Area (AQMA) at Two Gates in May 2014. An Air Quality Management Area gives the area special status where relevant professionals are required to consider a range of actions to improve air quality in the affected area (an Air Quality Action Plan).

To some extent air quality issues arising from vehicle exhausts has been reducing (and throughout the borough) due to improved engine efficiency and other technical advances such as the requirement for catalytic converters. In addition, the Staffordshire County Council Highways Department, which is responsible for traffic management at this junction, made alterations to the sequence of the traffic lights at the junction. As a result there was a reduction in the nitrogen dioxide concentration which led the Council to revoke the Air Quality Management Area in March 2018, after another detailed assessment by consultants.

Although the busy A5 trunk road runs through the Borough and the M42 Motorway runs close to the Borough boundary, there are no sensitive receptors (dwellings) sufficiently close to these roads, so that air quality is not considered to be an issue.

Although there have been no specific problem areas identified locally, nationally there is currently great interest in the extent that very small particles called PM_{2.5} impact on public health. In line with national guidance the Council is giving consideration to this pollutant and actions that can be taken to minimise its impact.

Tamworth Borough Council continues to work with other partners to tackle Air Quality such as other Borough & District Councils, Staffordshire County Council, the Highways Authority, Director of Public Health and Public Health England and where appropriate will participate in projects to improve Air Quality.

The Council is also responsible for the regulation of a number of Part A2 and Part B industrial installations that are of significance in terms of air quality. Each process / installation is regulated under the Environmental Permitting (England and Wales) Regulations 2016 and are regularly inspected by the Council's Environmental Health Officers to ensure they are controlling their emissions to atmosphere in accordance with national guidance. A list of processes that currently hold an Environmental Permit issued by Tamworth Borough Council (as of August 2023) is shown at Appendix F

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 Environment Improvement Plan³ sets out actions what 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 Strategy⁴, provides more information on local authorities' responsibilities to work towards these new targets and reduce PM_{2.5} in their areas. The Road to Zero⁵ details the Government's approach to reduce exhaust emissions

³ Defra. Environmental Improvement Plan 2023, January 2023

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

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.

As stated above, Tamworth Borough Council has been working with partner organisations to tackle air quality, particularly in and around our former Air Quality Management Area. We revoked our Air Quality Management Area in 2018 as the concentrations of nitrogen dioxide had fallen below the Air Quality Objective. We work with the Staffordshire local authorities via the Staffordshire Air Quality Forum to discuss and participate in county wide initiatives. However we have noted that since revoking our AQMA it is only the authorities that have retained an AQMA who primarily receive the benefits of schemes and have grants awarded. Notwithstanding this, we intend to acquire access to the Active Travel project to engage with children and their parents in their schools on ways to reduce our individual contributions to air pollution.

Conclusions and Priorities

The trend for the levels of Nitrogen Dioxide over the last five years as can be seen in fig A1 have been decreasing, though some of this can be attributed to the post pandemic effect of more people working from home, levels fell slightly in 2023. The key priorities for air quality in Tamworth include the continuation of the long-term air quality monitoring program which is kept under constant review to ensure that monitoring takes place in the most relevant locations and to tackle air quality issues at source wherever possible through regulatory controls of emissions to air from certain potentially polluting industries.

Though, the Two Gates Crossroads AQMA has been revoked, officers of the Environmental Health team will continue to consider the impact of new development on existing dwellings and ensuring that no new dwellings or other sensitive developments are constructed in areas of unacceptable air quality through the Planning system.

We moved two diffusion tubes in 2020 which had had continually low readings to new locations that we identified, which could possibly benefit from monitoring due to an increase in traffic, the two new sites are 60 High St, Dosthill(Q4) and 114 Overwoods Rd(Q1).

The tubes that are no longer being monitored due to consistently low readings are 2 Wessenden and 12 Brookside Way. The results for the new tubes Q1 & Q4 were reported for the first time in the 2020 ASR this will be their fourth year of readings.

Local Engagement and How to get involved

During 2023 we participated in a National Clean air day on the 15th of June 2023 via social media.

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

However going forward Tamworth wants to work with more organisations than we already do such as the West Midlands Combined Authority, we are working via the County Council with West Midlands Connect to explore electric vehicle charging points throughout the borough

We also seek to integrate some of the activities employed to tackle Climate Change with improving local air quality to this ends we have appointed a Climate Change Officer. With Air Quality and Climate Change in mind, Tamworth Borough Council is exploring a number of options

- Installing up to 4 electric vehicle charging points in public car parks.
- Installing electric vehicle charging hubs for Tamworth residents.
- Switching nearly 20% of our Street-scene vehicles to electric when the lease expires.

Air Quality is not “someone else’s problem”. All members of the community can play a part in improving air quality. Simple steps that we can all take include making short journeys on foot or by bicycle rather than by car or using public transport. As it is often traffic congestion that exacerbates poor air quality, avoiding using vehicles at busy times can be beneficial. Car sharing for journeys to work or for the school run can reduce the number of vehicles using busy roads and junctions.

Other simple measures that can be taken include:

- Purchasing low emission vehicles and or hybrid vehicles as individuals.
- Fleet vehicles and transport companies could play a major role in the use of low emission vehicles.
- Upgrading boilers to the newest and most efficient gas condensing boilers with the lowest nitrogen dioxide and carbon dioxide emissions
- Installing renewable options such as solar panels or wind turbines (in appropriate locations).

Members of the public can play their part in improving air quality in the area by obtaining further information from Tamworth Borough Council website

<http://www.tamworth.gov.uk/air-quality>.

Local Responsibilities and Commitment

This ASR was prepared by the Environmental Health Department of Tamworth Borough Council with the support and agreement of the following officers and departments:

Richard Powell	Planning Department
Tom Hobbs	Regeneration Department
Charlotte Cheeseman	Climate Change Officer

This ASR has been approved by:

David Foster Environment Portfolio holder
Tamworth Borough Council does not have a director of Public Health however Richard Harling Director of Health & Care, Staffordshire County Council has signed off section 2.3 (PM_{2.5}) of this ASR
Anna Millar Assistant Director for Growth & Regeneration

If you have any comments on this ASR please send them to Pollution Lead Officer at:

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1 Local Air Quality Management

This report provides an overview of air quality in Tamworth 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 Tamworth 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.

Tamworth Borough Council declared an AQMA at Two Gates in May 2014, which was revoked on 23rd March 2018 after monitoring results for the area were consistently under the air quality objective standard.

Information on Tamworth`s former AQMA can be found at: https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=271.

Tamworth Borough Council currently does not have any declared AQMAs. A local Air Quality Strategy is in place to prevent and reduce polluting activities. The Local Air Quality Strategy is available at [Air quality | Tamworth Borough Council](#)

Table 2.1 – Former 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)	
						At Declaration	Now 2023
AQMA Declared 1/2014	1 st May 2014, Revoked 23rd March 2018	NO ₂ annual mean	Tamworth	Two Gates, Dosthill, Tamworth.	YES	41.6 µg/m ³	19.0 µg/m ³

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

Defra's appraisal of last year's ASR concluded

1. The Annual Status Report sets out new information on air quality obtained by Tamworth Borough Council (TBC) as part of the Review & Assessment process required under the Environment Act 1995 (as amended by the Environment Act 2021) and subsequent Regulations.
2. TBC currently does not have any Air Quality Management Areas (AQMA). TBC did have a AQMA which was declared on 1st May 2014 for exceedances of the NO₂ annual mean Air Quality Objective (AQO) which was revoked on 23rd March 2018 after monitoring results for the AQMA were consistently below the AQO. Recorded monitoring data suggests shows no exceedance of the AQS objective in the last five years, which indicates an AQMA remains unneeded.
3. From 2023 those authorities who have not had to designate AQMAs and produce AQAPs will be required to draw up a local Air Quality Strategy. These strategies will not have a set format and authorities will be able to draw on content within their ASRs and local transport plans to produce them. The local Air Quality Strategy requirement aims to encourage local authority prevention and reduction of polluting activities in preference to only taking steps to reduce air pollution once exceedances have been identified.
4. TBC monitoring network consists of non-automatic NO₂ diffusion tube samplers at 14 sites. During 2022, no reported NO₂ annual mean concentrations were in excess of the AQS objective value (40 µg/m³). The highest reported concentration was 28.8 µg/m³, recorded at site Q6N. This is an increase on the annual mean NO₂ concentration of 26.7 µg/m³ recorded at the same site in 2021.
5. Robust QA/QC procedures have been applied. A national bias adjustment factor was used. This factor has been used as opposed to a local bias adjustment factor as TBC do not currently use continuous analysers. No diffusion tube NO₂ monitoring locations required distance correction during 2021, and all diffusion tube monitoring locations recorded data captures in excess of 75% in 2022 so no annualisation was required.
6. Defra recommends that Directors of Public Health approve draft ASRs. Sign off is not a requirement, however collaboration and consultation with those who have responsibility for Public Health is expected to increase support for measures to improve air quality, with co-benefits for all. TBC's 2023 ASR was signed off by the Director of Health and Care Staffordshire County Council.

Tamworth Borough Council has taken forward a number of direct measures during the current reporting year of 2023 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in [Error! Reference source not found.a](#) 12 measures are included within Table 2.2a, with the type of measure and progress Tamworth 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 2.2a.

More detail on these measures can be found in The Air Quality Strategy 2022 - 2027, and in the respective Action Plans of : TMBC Local Plan 2006 – 2031, Local Cycling & Walking Infrastructure Plan 2020 – 2030.

Progress on Key measures are:

Completion of planning application for the proposed South Staffordshire College

This will replace the college in Croft St. It will provide opportunities to promote sustainable transport as well as giving priority to pedestrian & cycle movement and facilitate and maximise the use of local transport. It will also be designed to enable charging of plug in and other ultra low emission vehicles. Construction is now underway with a revised aim for completion by the end of 2024 .

Investigation into EV charging hubs for Tamworth Borough Housing tenants

This is being replaced by a plan to provide a number of hubs in convenient locations for all Tamworth residents to use.

Replacement of some Street-scene vehicles with electric vehicles.

Five electric pool vans arrived January 2024 with the 6th arriving in March 2024.

Exploration of Policy HG3 of the Local Plan(2006-2031) Wilnecote Corridor The need to regenerate the area to enhance this important transport corridor had been identified, however a new local plan is being created so that a specific plan for the regeneration corridor has not been progressed, and the objectives will instead be incorporated into the new plan.

The principal challenges and barriers to implementation that Tamworth Borough Council anticipates is facing it that without an AQMA there is less government funding available for air quality projects, also Defra stopped its Air Quality Grants(by Bid) April 2024.

Tamworth Borough Council expects the following measures to be completed over the course of the next reporting year:

Further investigation of Electric Vehicle EV charging points in 1 public car park

We have signed a hosting agreement with BP pulse. Their intention is to put a new EV charging Hub in a public car park with up to 12 Ultra-Fast EV charging units, we are awaiting resolution of an infrastructure issue.

Investigation into suitable sites for EV charging hubs for Tamworth Borough

Tamworth Borough Council will continue exploring the possibility of providing a limited number of charging Hubs using LEVI funding awarded to Staffordshire County Council who are working in a consortium with Midland connect to roll out charging points across Staffordshire. At present Tamworth is looking at around 20 potential sites of EV charging hubs.

Completion of replacement of some Street-scene vehicles with electric vehicles.

The replacement of a number of vehicles at the end of their lease and their replacement with electric vehicles is being awaited due to supply chain issues.

Completion of the South Staffordshire College This will replace the college in Croft St. It will provide opportunities to promote sustainable transport as well as giving priority to pedestrian & cycle movement and facilitate and maximise the use of local transport. It will also be designed to enable charging of plug in and other ultra low emission vehicles.

Construction is now underway with a revised aim for it to be completed by the end of 2024.

priorities for the coming year are:

- 1 Investigation into suitable sites for EV charging hubs for Tamworth Borough.**
- 2 Further investigation of Electric Vehicle EV charging points in 1 public car park.**

Both of these priorities should reduce both Nitrogen dioxide and particulates pollution by enabling the residents of Tamworth, especially those without off street parking to access electric vehicle charging points near to their homes.

Tamworth Borough Council worked to implement these measures in partnership with the following stakeholders during 2023.

Staffordshire County Council , working with Midlands Connects Consortium
Staffordshire County Council Public Health
Staffordshire Travel Strategy group.

Table 2.2a – Progress on measures to Improve Air Quality

Measure No.	Measure	Category	Classification	Year Measure Introduced	Estimated/Actual Completion year	Organisation involved	Measure status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to implementation
1	EV charging points in public car parks	Promoting low emission transport	Procuring alternative refuelling infrastructure to promote EV recharging.	2021	2026	Tamworth Borough Council & Private Company	Planning	Reduced vehicle emissions	Reduced emissions	Planning phase	Site chosen, next step is external sign off.
2	20% electric street-scene vehicles	Promoting low emission transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	2021	Feb 2024	Tamworth Borough Council	Planning	Reduced vehicle emissions	Reduced emissions	All vehicles have now arrived	Supply chain issues due to the Covid Pandemic in China
3	Domestic smoke control	Public Information	Via the internet/Social Media	2019	Ongoing	Tamworth Borough Council	Planning	Reduced emissions	Reduction in breaches	Planning phase	No completion year given as ongoing initiative.
4	Enforcement of persistent dark smoke from household chimneys	Enforcement	Other	2022	Introduction of a fine policy	Tamworth Borough Council	Implementation	Reduced emissions	Reduction in breaches	Policy read to be implemented	Ongoing
5	Increase in Bus use	Alternatives to private vehicle use	Via Social Media	2019	Ongoing	Tamworth Borough Council & SCC	Planning	Reduced vehicle emissions	Reduced emissions	Ongoing	All TMB Staff informed of fare reduction for LA staff with Arriva buses.
6	Promotion of walking reduction in vehicle use in Tamworth	Alternatives to private vehicle use	Other	2019	Ongoing	Tamworth Borough Council & SCC	Planning	Reduced vehicle emissions	Length of new foot paths	Planning phase	LAs with AQMA's are prioritised for SCC funded projects that assist schools with alternative modes of travel. We have no AQMA
7	Promotion of Cycling	Alternatives to private vehicle use	Other	2019	Ongoing	Tamworth Borough Council & SCC	Implementation	Reduced vehicle emissions	Length of new cycle paths	Implementation ongoing	https://www.staffordshire.gov.uk/Transport/transportplanning/Walking-and-cycling.aspx No completion year given as ongoing initiative
8	Continued Integration with planning system	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2019	Ongoing	Tamworth Borough Council	Implementation	Reduced emissions	Reduced emissions	Ongoing	No completion year given as ongoing initiative.
9	Regulation of industrial processes	Environmental Permits	Other measure through permit systems and economic instruments	2019	Ongoing	Tamworth Borough Council	Implementation	Reduced emissions	Reduced emissions	Ongoing	Tamworth only has 13 Permitted processes of which 7 are petrol stations. No completion year given as ongoing initiative.
10	Continuing of Home & Hybrid working contracts for Tamworth Borough Council employees.	Alternatives to private vehicle use	Other	2022	Ongoing	Tamworth Borough Council	Home – 41% Hybrid - 20.7% Site – 38.3%	Reduced vehicle emissions	Reduced emissions	Ongoing	Ongoing
11	Approval of planning applications to install EV charging points at motorway services & other private sites.		Other	2022	Ongoing	Tamworth Borough Council/ Private Enterprise		Reduced vehicle emissions	Reduced emissions	Ongoing	Ongoing

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

The Environment Act 2021 established a legally binding duty on Government to set an annual mean target on the level of fine particulate matter (PM_{2.5}), these have been set in The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023. Also as detailed in Policy Guidance LAQM.PG22 (Chapter 8), and the Air Quality Strategy⁶, 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 are now two targets to work towards:

The annual mean concentration target, which requires that by the end of 31st December 2040, the annual mean level of PM_{2.5} in ambient air must be equal to or less than 10 µg/m³, with an interim target of 12 µg/m³ to be achieved by the end of January 2028 as set out in the Environmental Improvement Plan 2022.

The other major target is, the population exposure reduction target, this requires that there is at least a 35% reduction in population exposure by the end of 31st December 2040 ("the target date"), as compared with the average population exposure in the three-year period from 1st January 2016 to 31st December 2018 ("the baseline period"), determined in accordance with regulation 8.

Particulate matter, or PM, is the term used to describe particles found in the air, including dust, dirt and liquid droplets. PM comes from both natural and man-made sources, including traffic emissions and Saharan-Sahel dust. These particles can be suspended in the air for long periods of time, and can travel across large distances.

PM less than 10 micrometres in diameter (PM₁₀) pose a health concern because they can be inhaled into and accumulate in the respiratory system. PM less than 2.5 micrometres in diameter (PM_{2.5}) are referred to as "fine" particles and are believed to pose the greatest health risks, as they can lodge deeply into the lungs and also pass into the bloodstream.

PM_{2.5} is the pollutant which has the biggest impact on public health and on which the Public Health Outcomes Framework (PHOF) D01 Fraction of mortality attributable to particulate air pollution (2021), Public Health Outcomes Framework indicator ⁷ is based.

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.

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

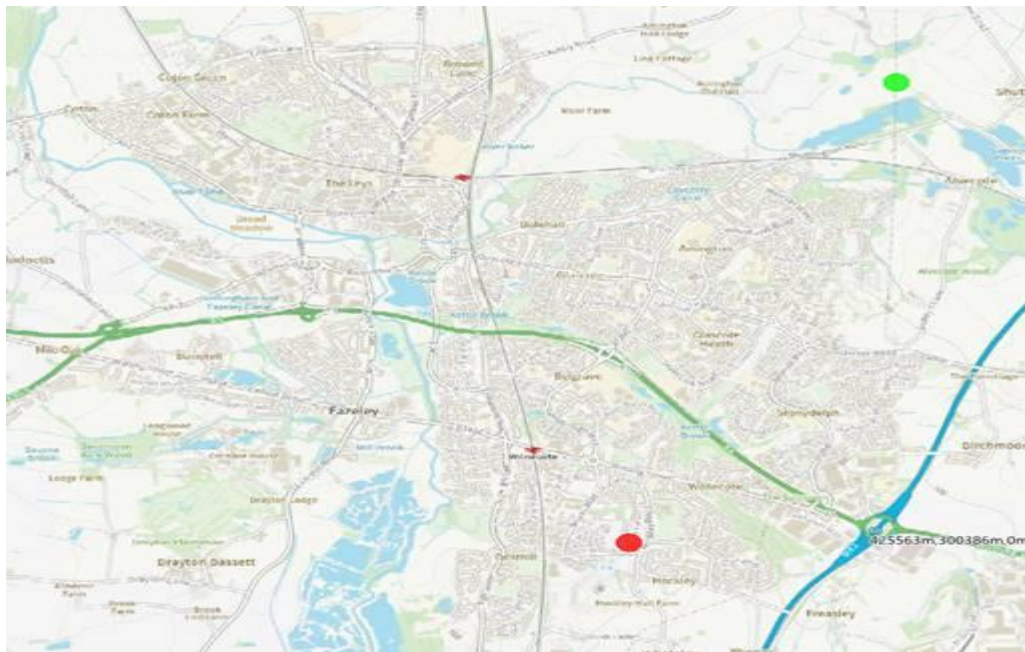
⁷ Public Office for Health Improvement and Disparities. Public health profiles. 2024 <https://fingertips.phe.org.uk> © Crown copyright 2024

2.3.1 Particulate Matter (PM_{2.5}) Levels in Staffordshire and Stoke-on-Trent

Only Stoke on Trent monitor locally for PM₁₀. However a number of authorities have been approached by Defra to host an Automatic Urban and Rural Network (AURN) monitor, which if suitable sites can be found would mean that these councils will have PM data specific to their area rather than having to rely on the PM_{2.5} background maps provided by Defra.

As Tamworth Borough Council doesn't monitor either PM_{2.5} nor PM₁₀ a map indicating the area of maximum background annual mean PM_{2.5} concentrations and the area of minimum background annual mean PM_{2.5} has been derived from the Defra Background maps. From these maps Tamworth Borough Council has determined that, its highest level is 10.25 µg/m³ and is located at Peel Drive, Wilnecote, its lowest level is 7.47 µg/m³ and is land located off Shuttington Road.

Fig 3 Map of highest & lowest concentrations of PM_{2.5} in Tamworth



2.3.2 PM_{2.5} and Mortality in Staffordshire & Stoke-on-Trent

Although the levels of PM_{2.5} within the County and City of Stoke on Trent are below the 2020 EU Limit value, the impact on adult mortality directly attributable to PM_{2.5} is nonetheless still an important public health issue within Staffordshire and Stoke-on-Trent. This is revealed in data obtained from UK Health Security Agency(UKHSA) used to inform Public Health Outcomes Framework indicator D01⁷, as shown in Figure 1

The estimated percentage number of deaths attributable to PM_{2.5} in adults over 30 has been translated into the estimated number of attributable deaths for each local authority area within Staffordshire, and are shown in Figure 2. The data presented to 2022 is the latest data available at time of publication of this report. Approximately on average 5.7% of deaths between 2018 to 2022 within the County can be attributed to PM_{2.5}. (Note the method for calculating this figure has changed we only have the data for 2018, 2019, 2020, 2021 & 2022 using this new method). As the 2020 data for this indicator includes the period from March 2020 onwards, the mortality data used in its calculation will reflect effects of the COVID-19 pandemic.).

Figure 1 Estimated average number of deaths by local authority area attributable to PM_{2.5} within Staffordshire for adults over 30 2018 to 2022

District/County	Percentage
Newcastle-under-Lyme	5.5%
Stafford	5.4%
East Staffordshire	5.9%
South Staffordshire	5.7%
Lichfield	5.9%
Staffordshire Moorlands	5.2%
Cannock Chase	5.9%
Tamworth	6.3%
Stoke on Trent	5.8%
Staffordshire County	5.7%
England	6.2%

Figure 2 Public Health Outcomes Framework Indicator 3.01- Fraction of annual all cause adult mortality attributable to anthropogenic (human made) particulate air pollution (measured as fine particulate matter, PM_{2.5}) for Staffordshire Authorities 2018 to 2022⁷

District/County	2018			2019			2020			2021			2022		
	Deaths - all causes persons 30+	%*	Estimated attributable deaths	Deaths - all causes persons 30+	%*	Estimated attributable deaths	Deaths - all causes persons 30+	%*	Estimated attributable deaths	Deaths - all causes persons 30+	%*	Estimated attributable deaths	Deaths - all causes persons 30+	%*	Estimated attributable deaths
Newcastle-under-Lyme	1334	5.7	80	1282	6.8	90	1548	4.7	70	1409	5	70	1402	5.1	70
Stafford	1336	5.8	80	1315	6.8	90	1565	4.5	70	1432	4.8	70	1433	5.0	70
East Staffordshire	1093	6.3	70	1128	7.3	80	1355	5.1	70	1287	5.1	70	1141	5.6	60
South Staffordshire	1211	6.3	80	1212	7.0	90	1418	4.9	70	1333	5.1	70	1297	5.3	70
Lichfield	1087	6.4	70	1093	7.2	80	1272	5.2	70	1129	5.1	60	1155	5.5	60
Staffordshire Moorlands	1108	5.2	60	1080	6.6	70	1276	4.5	60	1133	4.7	50	1186	4.9	60
Cannock Chase	976	6.4	60	908	7.2	70	1046	5.1	50	1089	5.2	60	1038	5.4	60
Tamworth	653	6.9	50	678	7.7	50	752	5.6	40	730	5.4	40	734	5.7	40
Stoke on Trent	2746	6.1	170	2490	7.2	180	3034	5.0	150	2790	5.2	150	2569	5.3	140
Staffordshire	8792	6.1	530	8692	7.0	610	10227	4.9	500	9539	5	480	9380	5.3	500

2.3.3 Actions being taken within Staffordshire to reduce PM_{2.5}

A number of the Staffordshire Authorities are currently involved in implementing measures to reduce levels of NO₂ within their areas, which are detailed more extensively in their ASRs. Since the update of the Environment Act 2021 there is now a statutory duty imposed on Local Authorities in England to reduce PM_{2.5}, a number of the measures are complementary with those being used to reduce NO_x. 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 PM_{2.5} within the County. These are outlined in Table 2.4 below;

Tamworth Borough Council is taking the following measures as outlined in Table 2.4 and in conjunction with our partners at the county council and other partners identified in the table to address PM_{2.5} as well as those in Table 2.2a. We are particularly concentrating efforts on actions 1,3&4 from Table 2.2a.

Smoke Control areas

Tamworth Borough Council declared the whole of the borough to be a smoke control area in the late 1970s.

Changes to the Environment act 2021 has enabled councils to now issue fines with respect to dark persistent smoke coming from household chimneys were as before this change this was difficult to address as household chimneys were exempt from being a statutory nuisance.

This change should enable Tamworth Borough Council to address the incorrect use of log burners even if they are Defra exempt. Tamworth undertook publicising work on the new smoke control powers in an event called Love Tamworth in September 2023 and our communications team put information on social media with respect to smoke control.

This may have contributed to Tamworth not having issued any fines last year with respect to the new Smoke Control from domestic chimney regulations.

Table 2.2 – 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 SCOOT in areas of Newcastle Town Centre AQMA and Kidsgrove AQMA. Live labs monitoring work linked to congestion in Newcastle.	UTC in Cannock Town Centre	UTC in Stafford Town Centre	Traffic signal reconfiguration within the Wellington Street/Derby Street/Borough Road gyratory to help improve traffic flow and reduce congestion within AQMA 1 to be delivered in 2024-25	Liaising with Midlands Connect to increase usage of M6 Toll to reduce congestion on A5 & lobbying for upgrade of A38 & A5. Junction improvements at Muckley Corner. UTC in Lichfield Town Centre.		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 / Congestion charging	low		No					M6 Toll	M6 Toll		
	Anti-idling enforcement	low		Anti Idling Campaign toolkits available to schools for pupil run campaign.	Anti Idling Campaign toolkits available to schools for pupil run campaign.	Anti Idling Campaign toolkits available to schools for pupil run campaign.	Anti Idling Campaign toolkits available to schools for pupil run campaign.	Anti Idling Campaign toolkits available to schools for pupil run campaign.	Anti Idling Campaign toolkits available to schools for pupil run campaign.	Anti Idling Campaign toolkits available to schools for pupil run campaign.	Anti Idling Campaign toolkits available to schools for pupil run campaign.	Anti Idling Campaign toolkits available to schools for pupil run campaign.
	Other			Live Public Facing portal linked to Zephyr air quality monitor for PM _{2.5} with district modelling.				Live Public Facing portal linked to Zephyr air quality monitor for PM _{2.5} with district modelling.				
Promoting Travel Alternatives	Workplace Travel Planning	low		Where developers are required to produce and implement Workplace Travel Plans as part of the planning process,, SCC review and monitor the outcomes.								
	Encourage / Facilitate home-working	low		Agile working policy applied	Homeworking Policy adopted	Homeworking Policy adopted	Homeworking Policy adopted	Homeworking Policy adopted	Homeworking policy adopted	Agile working policy adopted	Homeworking policy adopted	
	School Travel Plans	low		Where School Travel Plans are required as part of the planning process SCC review and monitor the outcomes Residential developers are required to make S106 contributions where appropriate to fund active travel measures and initiatives carried out within schools. School Travel Plans are written and produced by the Active School Travel Team for any school in Staffordshire wishing to take part in the accredited Modeshift STARS with support of resources, toolkits, assemblies, campaigns and lesson plans to encourage behaviour change								
	Promotion of cycling	low		https://www.staffordshire.gov.uk/Transport/Cycling/Cycling-and-active-travel.aspx Review of LCWIP will include additional areas such as Biddulph and Rugeley Cycling and active travel - Staffordshire County Council INTO Walking and Cycling Social Prescribing Specific to Newcastle-under-Lyme www.staffordshire.gov.uk/walkingandcycling (just newcastle) Benefits of Cyling promoted through the Travel Plan Process (all) Gov Cycle to work scheme promoted and encouraged via the Travel Plan Process Bikeability is promoted and delivered in most schools in Staffordshire in line with Active Travel England’s target of 80% of all year 6 pupils to receive Bikeability training by 2025. Staffordshire is on target to achieve this figure. (Link to Bikeability Page)								
Promotion of walking	low		https://www.staffordshire.gov.uk/Transport/Cycling/Cycling-and-active-travel.aspx Review of LCWIP will include additional areas such as Biddulph and Rugeley INTO Walking and Cycling Social Prescribing Specific to Newcastle-under-Lyme https://www.staffordshire.gov.uk/Transport/Cycling/INTO/Get-INTO-walking-and-cycling-in-Newcastle-under-Lyme.aspx INTO Walking and Cycling Social Prescribing Specific to Newcastle-under-Lyme www.staffordshire.gov.uk/walkingandcycling (just newcastle) Walk to school campaign resources offered free to all Staffordshire schools including railing banner, posters, digital toolkit and reward bookmarks for pupils (LINK HERE)									

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
				Benefits of Walking promoted through the Travel Plan process (all) Walks and Country Trails - Staffordshire County Council Good Life Health & Wellbeing in the Community Same as other Staffs authorities							
	Staffordshire Share a Lift Scheme			Car Share promoted via Travell Plan process.							
	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 to be fully accessible and regenerated through Town Deal.		Redevelopment of Stafford Station into a gateway associated with HS2 works.	Burton Forecourt improvements completed in 2021 with segregated bus lanes/stops to help improve flow.	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/ District Strategies	high		District integrated transport strategies - Staffordshire County Council							
	Public transport improvements-interchanges stations and services	low		Oct 2023 the re-opening of the Stoke – Leek line to be funded by scrapping of Northern leg of HS2	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 m2.ulti-modal		Alternative location for bus station currently under consideration	Construction on the West Midlands interchange has started.	Planned improvements at Tamworth station
	Public cycle hire scheme	low					e-scooter trials NOW ENDED AWAITING CONCLUSIONS	Working with local cycle firms to establish an affordable bike rental scheme to increase uptake of sustainable travel in Burton.			
	Cycle network	low		Local cycling and walking infrastructure plan 2021 - Staffordshire County Council Staffordshire cycle maps currently awaiting audit and review							
	Bus route improvements	high		As a result of BSIP & BSIP+ funding consideration is being given to bus route improvements where feasible. New 95 route from Audley to Biddulph introduced.	As a result of BSIP & BSIP+ funding consideration is being given to bus route improvements where feasible. New 95 route from Audley to Biddulph introduced.	As a result of BSIP & BSIP+ funding consideration is being given to bus route improvements where feasible	As a result of BSIP & BSIP+ funding consideration is being given to bus route improvements where feasible	Defra air quality bid to fund procurement of electric buses & associated infrastructure along services 8 & 9 through Burton secured from Feb 2024. Scheme to be delivered 2024 with funding from the Defra Air Quality grant and Level up Funding 2.	As a result of BSIP & BSIP+ funding consideration is being given to bus route improvements where feasible. New 830 service to Hill Ridware introduced.	As a result of BSIP & BSIP+ funding consideration is being given to bus route improvements where feasible	As a result of BSIP & BSIP+ funding consideration is being given to bus route improvements where feasible
	Active Travel Fund	low		Move More Staffordshire Moorlands a collaborative strategy that will see partners working together.	ATF 2 measures to encourage walking and cycling	ATF2 measures to encourage walking and cycling.	ATF 2 measures to encourage walking and cycling.	ATF 2, 3 & 4 measures to encourage walking/ cycling. Footway widening with segregated cycle & pedestrian routes along Station St to the railway station completed late 2023. Further pedestrian & cycle improvements within the			ATF 3 and 4 measures to encourage walking and cycling

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	
									AQMA & across Burton planned 2024 - 2026			
	Levelling Up Fund 2	medium			<p>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.</p> <ul style="list-style-type: none"> ▪ 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. <p>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.</p>							
Alternatives to private vehicle use	Bus based Park & Ride	medium								New bus central station as part of Friarsgate development scheme		
Policy Guidance and Development Control	Planning applications to require assessment of exposure / emissions for development requiring air quality impact assessment	high		https://www.staffs-moorlands.gov.uk/media/6155/Adopted-Local-Plan/pdf/Adopted-Local-Plan.pdf?m=1601645140880	Included as part of Local Validation List Adoption of SCC EV Strategy Adoption of SCC EV Strategy Adoption of SCC EV Strategy Adoption of SCC EV Strategy		http://www.staffordbc.gov.uk/planning/planning-policy/local-plan-2012-2031	https://www.eaststaffsbc.gov.uk/planning/planning-policy/local-plan-2012-2031	https://www.lichfielddc.gov.uk/Council/Planning/The-local-plan-and-planning-policy/Planning-policy.aspx	Adopted South Staffordshire Local Plan, Local Plan, Planning Framework (sstaffs.gov.uk)	Local & National Validation requirements : http://www.tamworth.gov.uk/sites/default/files/planning_docs/National-and-Local-Validation-requirements-2017.pdf	
	Air Quality Strategy			Draft Air Quality Action Plan 2024-2029 submitted to Defra awaiting feedback.	Revised Air Quality Action Plan due in 2024 will include requirements for PM _{2.5}		2019-2023 Air Quality Strategy		Revised Air Quality Action Plan & overarching Air Quality Strategy has been drafted & approved internally & submitted to Defra for approval. Going for public consultation/ formal adoption 2024		In development	2022-2027 Air Quality Strategy
	Planning Guidance for developers			Air Quality Emissions Mitigation guidance for developers available, being updated with view to be adopted as an official SPD	To be developed alongside New Local Plan HERE		http://www.stafforddc.gov.uk/planning/planning-policy/supplementary-planning-policy-documents		Currently informal guidance in place, but the revised Air Quality Action Plan includes a measure for formal guidance as part of a Supplementary Planning Document (SPD)		Planning Guidance and SPDs (sstaffs.gov.uk)	https://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 used Developer Contributions SPD has reference to contributions to mitigate air quality impacts.	To be considered as above				Damage cost assessment now required for applicable applications.			

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	
	Planning Policies			https://www.staffs-moorlands.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 HERE	Local Plan is currently under review https://www.cannockchasedc.gov.uk/residents/planning-and-building-control/planning-policy/cannock-chase-local-plan	http://www.staffordbc.gov.uk/planning/planning-policy/local-plan-2012-2031	Supplementary planning document to be developed as part of revised Air Quality Action Plan	https://www.lichfielddc.gov.uk/Council/Planning/The-local-plan-and-planning-policy/Planning-policy.aspx	Planning Guidance and SPDs (sstaffs.gov.uk)	https://www.tamworth.gov.uk/local-plan	
	Low Emissions Strategy	high		Forms part of Climate change action plan & Climate change action plan part 2	In development			Part of Climate Change Action Plan developed in 2022 https://www.eaststaffsbc.gov.uk/environmental-health/climate-change/what-we-are-doing-tackle-climate-change				
	Route Plans/ Strategic routing strategy for HGV's	high		https://www.staffordshire.gov.uk/Transport/transportplanning/localtransportplan/home.aspx This should be considered as part of planning applications where new proposals come forward.								
	Delivery and Service plans	medium										
	Promoting low emission public transport	high										
	Vehicle retrofitting programmes	medium		On going / in development Energy Saving Trust have reviewed current fleet and issued recommendations including training .		Cannock Council Ultra low emission vehicle strategy in development. Cannock Council Green Transport Strategy in development.			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		https://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								
	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.	Ongoing as part of the climate change agenda, working towards decarbonising the waste fleet by 2030. Currently looking at funding options for feasibility study of waste depot decarbonisation.		Council new vehicles all comply with Euro 6	
	Company Vehicle Procurement - Prioritising uptake of low emission vehicles	high		Majority of fleet comply with highest EURO emission next replacement period in 2028.				Investigating replacing old vehicles within the fleet with more modern cleaner vehicles, which comply with the prevailing EURO standard. This will be extended to all Council 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	
				EV salary Sacrifice Scheme launched for employees								
	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 Strategy adopted 2022. Currently own 1 rapid charger and 2 fast dual charge Electric Vehicle Charging Points (EVCPs) Further EVCPs shortlisted for funding through LEVI .		EV Parking at Council Offices, staff & public car parks	EV Strategy to be adopted 2024 . Looking at charging hubs using Levi funding.	
	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		Taxi licensing policy promotes uptake of electric vehicles	Scheduled to promote EV	All taxi vehicles must meet Euro 6 emission standards.			Looking at introducing Euro VI Standard.	
	Taxi emission incentives	medium		In development				Viability for incorporation of financial incentives in taxi licensing policy to encourage EV uptake in development				
	EV Strategy	high		Public Electric Vehicle Charging Infrastructure Strategy 2022		Staffordshire EV Charging Infrastructure Strategy https://www.staffordshire.gov.uk/Transport/Sustainable-travel/Electric-vehicles/02-SCC-Public-EV-Charging-Strategy-V3-3.pdf						
	Adoption of SCC EV Strategy	high		Adoption of SCC EV Strategy February 2023	Adoption of SCC EV Strategy Cabinet 10 January, 2023	Adoption of SCC EV Strategy April 2023	Adoption of SCC EV Strategy Aug/Sept 2023	Adoption of SCC EV Strategy March 2023 Their own local agenda and informative web site: Electric Vehicles and Charging Infrastructure East Staffordshire Borough Council (eaststaffsbc.gov.uk)		Adoption of SCC EV Strategy July 2023	Adopted SCC EV Strategy Apr 2023 Currently drafting a local EV strategy Adoption of SCC EV strategy:	
Environmental permits	Introduction/increase of charges through permit systems and economic instruments	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			https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211863/env-permitting-general-guidance-a.pdf (Chapter 15)							

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			https://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			https://www.staffordbc.gov.uk/environment/smoke-control.cfm	Smoke Control Area in force covering Burton Town As part of the revised Air Quality Action Plan a Smoke Control Policy will be developed in 2024-25 to incorporate the new smoke controls laws and charging regime	https://www.lichfielddc.gov.uk/home-garden/bonfires-barbecues-smoke/1	Smoke Control Areas South Staffordshire District Council (sstaffs.gov.uk)	Drafting of fines policy for issue of persistent dark smoke from domestic chimneys.
	Garden Bonfires - Advice and nuisance enforcement			SMDC Smoke Nuisance and Bonfires & EPUK leaflet used			http://www.staffordbc.gov.uk/environmental-health/pollution/bonfires	Information provided via the website http://eaststaffsbc.gov.uk/environmental-health/pollution/bonfires	https://www.lichfielddc.gov.uk/home-garden/bonfires-barbecues-smoke/1	Smells, Dust and Fumes South Staffordshire District Council (sstaffs.gov.uk)	http://www.tamworth.gov.uk/air-quality
	Commercial burning advice and enforcement			SMDC Commercial smoke & waste management "its a burning issue" EA leaflet			http://www.staffordbc.gov.uk/environmental-health/pollution/bonfires	Information provided via http://eaststaffsbc.gov.uk/environmental-health/pollution/smoke-control-areas	https://www.lichfielddc.gov.uk/home-garden/bonfires-barbecues-smoke/1	Smells, Dust and Fumes South Staffordshire District Council (sstaffs.gov.uk)	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	Information shared as appropriate
	Multi agency working with Staffordshire Fire Service & Building Control re chimney fires & DIY heating systems			Information shared as appropriate.				Information shared as appropriate	Information shared as appropriate	Information shared as appropriate	Information shared as appropriate

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

This section sets out the monitoring undertaken within 2023 by Tamworth 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 Monitoring Sites

Tamworth Borough Council does not operate any automatic (continuous) monitors.

3.1.2 Non-Automatic Monitoring Sites

Tamworth Borough Council undertook non- automatic (i.e. passive) monitoring of NO₂ at 14 sites during 2023. Table A.2 in Appendix A presents the details of the non-automatic sites. Maps showing the location of the monitoring sites are provided in figure D.1 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.

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 (NO₂)

Table A.4 in Appendix A compares the ratified and adjusted monitored NO₂ annual mean concentrations for the past five years with the air quality objective of 40µg/m³. 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.

There are no exceedances of the annual mean Air Quality Objective for nitrogen dioxide for 2023. There is no need, therefore, to consider declaring an AQMA in the Tamworth Borough Council area. The level of nitrogen dioxide in the borough appears to have decreased slightly in some areas of Tamworth(13 diffusion tubes) all tube readings are lower than those for 2019.

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites
Tamworth does not have any Automatic monitoring sites.

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)
N10	47 Upper Gungate	Roadside	420760	304560	NO2	No	5.0	2.2	No	3.0
N3	34 Claremont Rd	Urban Background	420040	305690	NO2	No	6.0	2.1	No	3.0
Q1	114 Overwoods	Roadside	423105	300367	NO2	No	4.0	2.1	No	3.0
Q2	50 Lakeland Drive	Roadside	423430	301280	NO2	No	39.0	1.7	No	3.0
Q3	14 High Broom Court	Roadside	420350	303480	NO2	No	6.0	1.8	No	3.0
Q4	60 High St Dosthill	Roadside	421452	300082	NO2	No	2.5	2.1	No	3.0
Q6S	Dosthill Rd Two Gates	Roadside	421588	301526	NO2	No	12.0	1.8	No	3.0
Q6W	Watling St Two Gates Club	Roadside	421560	301605	NO2	No	17.0	2.8	No	3.0
Q6N	Tamworth Rd Two Gates	Roadside	421580	301630	NO2	No	15	2.6	No	3.0
Q6EX	118 Highcliffe Rd	Roadside	421600	301600	NO2	No	6	15	No	3.0
Q7	253 Glascote Rd	Roadside	422110	303420	NO2	No	3	2	No	3.0
Q8	1 Arkall Close	Roadside	421380	305450	NO2	No	9	2.1	No	3.0
Q9	Opp 101 Gungate Comberford Rd	Kerbside	420823	304899	NO2	No	26	1	No	3.0
Q10	251 Tamworth Rd Ammington	Kerbside	4223090	304300	NO2	No	7	1.1	No	3.0

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

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2023 (%) ⁽²⁾	2019	2020	2021	2022	2023
N10	420760	304560	Roadside	100.0	100.0	32.2	20.4	25.4	25.2	23.1
N3	420040	305690	Urban Background	84.6	84.6	19.4	14.3	13.8	13.4	12.8
Q1	423105	300367	Roadside	100.0	100.0		19.8	20.3	20.9	19.4
Q2	423430	301280	Roadside	100.0	100.0	22.7	17.3	18.5	18.2	16.7
Q3	420350	303480	Roadside	100.0	100.0	24.8	18.1	18.7	20.6	19.1
Q4	421452	300082	Roadside	100.0	100.0		20.7	21.3	21.6	20.7
Q6S	421588	301526	Roadside	92.3	92.3	36.9	23.3	28.6	28.6	25.3
Q6W	421560	301605	Roadside	100.0	100.0	32.0	22.2	26.1	26.1	24.5
Q6N	421580	301630	Roadside	100.0	100.0	33.9	26.1	26.7	28.8	26.5
Q6EX	421600	301600	Roadside	100.0	100.0	25.9	20.6	19.9	21.9	19.0
Q7	422110	303420	Roadside	100.0	100.0	29.6	23.7	24.0	23.7	23.8
Q8	421380	305450	Roadside	100.0	100.0	21.2	17.5	16.6	17.7	16.3
Q9	420823	304899	Kerbside	90.4	90.4	29.7	22.1	21.9	24.0	24.0
Q10	423090	304300	Kerbside	100.0	100.0	23.5	17.8	18.9	20.2	18.3

☒ 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/m³.

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

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

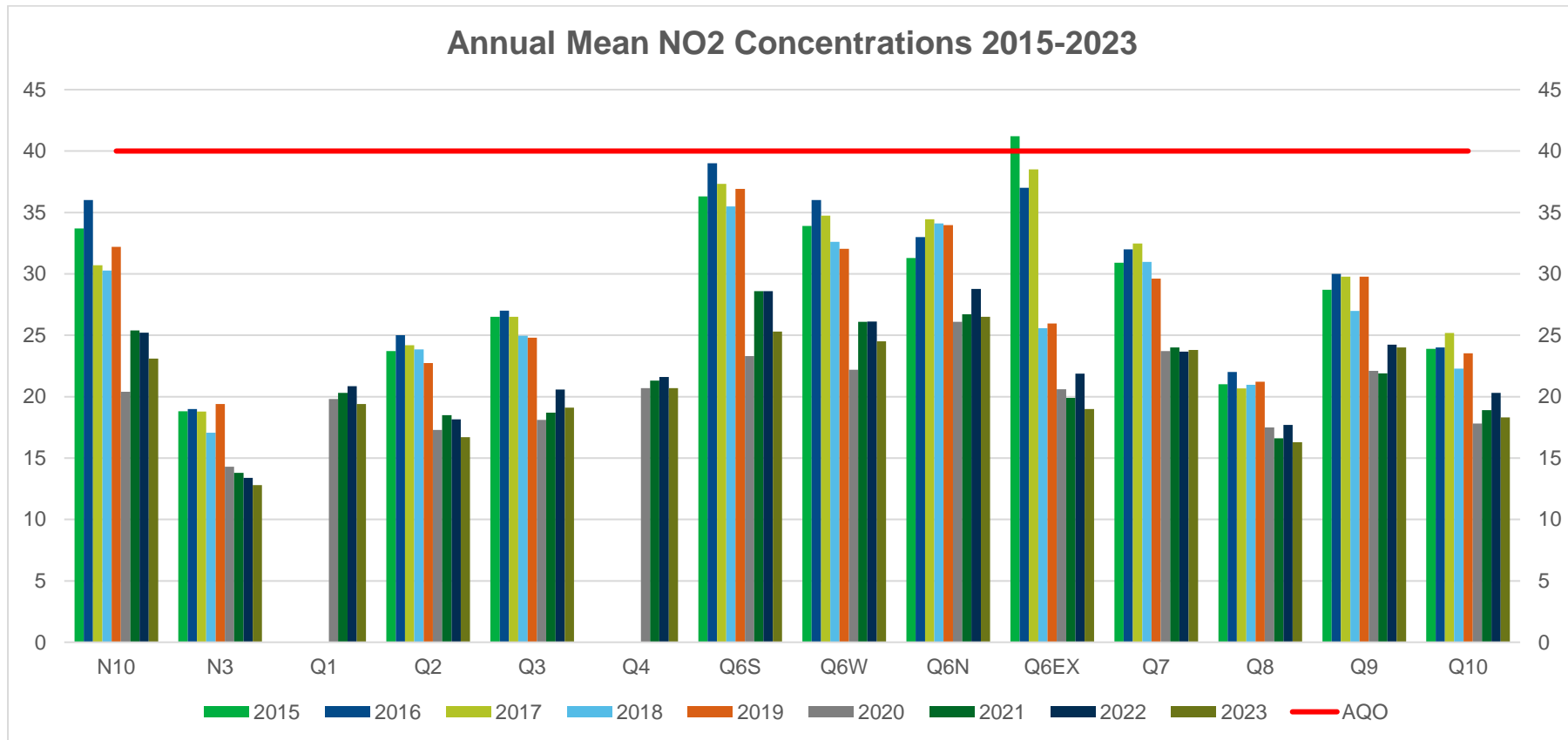
Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

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 NO₂ Concentrations



Data collection for Q1 & Q4 only started 2020

Appendix B: Full Monthly Diffusion Tube Results for 2023

Table B.1 – NO₂ 2023 Diffusion Tube Results (µg/m³)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Easting)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure	Comment
N10	420760	304560	32.0	33.1	28.4	28.6	21.8	19.2	19.8	23.6	27.7	28.6	30.7	28.7	26.9	23.1		
N3	420040	305690	missing	19.6	15.1	12.2	11.1	10.6	10.5	10.7	17.2	17.9	23.9	missing	14.9	12.8		
Q1	423105	300367	28.7	27.9	24.2	18.8	20.3	18.8	15.9	18.8	22.6	24.6	31.2	18.4	22.5	19.4		
Q2	423430	301280	24.5	24.9	21.1	17.1	16.4	15.5	11.1	17.5	20.1	22.5	25.3	17.0	19.4	16.7		
Q3	420350	303480	27.2	29.6	21.2	18.9	14.6	15.6	17.7	18.3	24.8	25.1	29.2	24.6	22.2	19.1		
Q4	421452	300082	27.3	28.1	24.7	24.4	21.6	21.0	16.8	20.2	26.4	26.6	29.9	21.6	24.1	20.7		
Q6S	421588	301526	35.7	37.8	34.2	28.9	29.8	26.7	20.8	23.8	missing	31.4	28.7	26.0	29.4	25.3		
Q6W	421560	301605	30.0	34.5	31.3	30.4	17.3	30.5	21.4	25.8	29.7	32.3	33.9	24.3	28.5	24.5		
Q6N	421580	301630	30.1	35.4	34.6	26.5	24.9	21.8	27.5	26.0	36.5	35.2	38.9	32.2	30.8	26.5		
Q6EX	421600	301600	27.6	27.5	24.0	19.3	14.9	12.2	18.6	19.1	25.9	23.6	29.0	22.8	22.0	19.0		
Q7	422110	303420	32.8	31.7	26.4	25.1	21.5	23.6	20.5	24.6	28.5	36.6	34.7	26.6	27.7	23.8		
Q8	421380	305450	22.7	23.7	19.2	15.6	16.3	14.4	12.6	16.4	20.2	19.4	27.4	19.3	18.9	16.3		
Q9	420823	304899	29.8	34.3	28.0	22.7	23.1	missing	21.3	22.5	28.7	28.6	36.4	32.1	28.0	24.0		
Q10	423090	304300	27.0	26.8	19.8	16.5	13.9	15.8	15.6	18.0	20.9	25.7	31.0	23.8	21.2	18.3		

- 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.
- Tamworth 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

Diffusion tubes are used to provide a relatively simple and cost-effective method of monitoring for nitrogen dioxide at several locations where nitrogen dioxide levels are likely to be high as identified in previous reviews and assessments, due to the proximity of significant sources (normally traffic).

The tube is a small plastic device, approximately 6 centimetres long, open at one end, with a disc at the other end that reacts to nitrogen dioxide. They are located at sites, typically on lamp posts or other street furniture or on the facades of properties and exposed for a 4–5 week period, in line with the UK national survey.

The tubes contain a mesh which is doped with 20% v/v Triethanolamine (TEA) in Water and are fitted with a cap before and after exposure which is undertaken according to the nationally published monthly schedule.

New or Changed Sources Identified Within Tamworth Borough During 2023

Tamworth Borough Council has not identified any new sources relating to air quality within the reporting year of 2023.

Additional Air Quality Works Undertaken by Tamworth Borough Council During 2023

Tamworth Borough Council has not completed any additional works within the reporting year of 2023, other than those reported in Table 2.2a. and Table 2.4.

QA/QC of Diffusion Tube Monitoring

The diffusion tubes are supplied and analysed by **Staffordshire Highways Laboratories**, which participates in the *AIR NO₂ Proficiency Testing Scheme* for the analysis the diffusion tubes.

Air PT Scheme

The AIR NO₂ Proficiency Testing Scheme is an independent analytical proficiency-testing (PT) scheme, operated by LGC Standards and supported by the Health and Safety Laboratory (HSL). The AIR PT scheme, started in April 2014, and combines two long running PT schemes: LGC Standards STACKS PT scheme and HSL WASP PT scheme.

Over a rolling five round AIR PT window, one would expect that 95 % of laboratory results should be $\leq \pm 2$. If this percentage is substantially lower than 95 % for a particular laboratory, within this five round window, it may be concluded that the laboratory in question may have significant systematic sources of bias in their assay.

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).

Staffordshire Highways Laboratory explanation of their performance in this scheme is given below.

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.

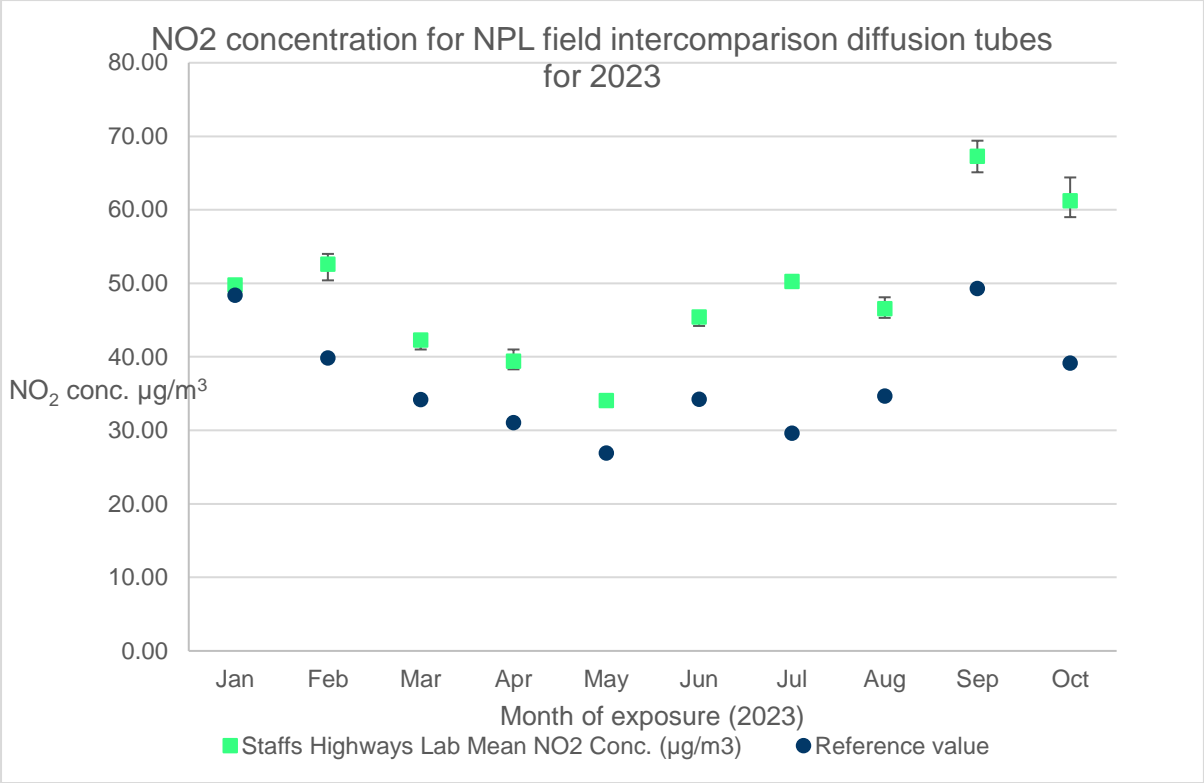
For the most up to date published results in the AIR PT Scheme see the Defra website: <https://laqm.defra.gov.uk/diffusion-tubes/qa-qc-framework.html>

A summary of Staffordshire Highways of z-score results for 2023 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	

Field Intercomparison (NPL)

Staffordshire Highways Laboratory’s performance for all results of 2023 received so far (Jan-Oct 2023) was classified as ‘GOOD’ (CoV <20). The chart below shows their results (blue squares), compared to the reference value (orange dots) for each month.



Bias factor

The bias adjustment factor spreadsheet on the Defra website was updated in March 2024. The overall bias factor for Staffordshire Highways Laboratory for 2023 (including the Field Intercomparison result and all the co-location results from participating local authorities, total of 11 studies) was 0.86.

Diffusion Tube Annualisation

All diffusion tube monitoring locations within Tamworth Borough Council recorded data capture of 75% therefore it was not required to annualise any monitoring data. In addition, any sites with a data capture below 25% do not require annualisation.

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/NO₂ continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

Tamworth Borough Council have applied a national bias adjustment factor of 0.86 to the 2023 monitoring data. A summary of bias adjustment factors used by Tamworth Borough Council over the past five years is presented in Table C.1.

We use a national bias adjustment factor chosen as opposed to a local factor because we do not use continuous analysers.

Table C.1 – Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2023	National	03/24	0.86(11 Studies)
2022	National	03/23	0.87 (12 Studies)
2021	National	09/22	0.85 (16 studies)
2020	National	09/21	0.85 (15 studies)
2019	National	09/20	0.93 (17 studies)
2018	National	06/19	0.89 (14 studies)
2017	National	09/18	0.88 (11 studies)
2016	National	06/17	0.83 (15 studies)

NO₂ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO₂ concentration at the nearest location relevant for exposure should be estimated using the Diffusion Tube Data Processing Tool/NO₂ fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO₂ concentrations corrected for distance are presented in Table B.1.

No diffusion tube NO₂ monitoring locations within Tamworth Borough Council required distance correction during 2023.

QA/QC of Automatic Monitoring

No automatic NO₂ monitoring locations within Tamworth Borough Council required distance correction during 2023.

Table C.2 – Annualisation Summary (concentrations presented in $\mu\text{g}/\text{m}^3$)

Site ID	Annualisation Factor	Annualisation Factor	Annualisation Factor	Annualisation Factor	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean	Comments

No diffusion tubes required annualisation.

Bias Adjustment Factor

It is known that there are systematic differences in the performance of different laboratories and preparation methods of diffusion tubes. Table C.3 shows the studies that have been used to compare results from diffusion tubes (analysed by Staffordshire Highways Laboratories) to results of co-located automatic chemiluminescence monitors, where data has been collected for 9 months or more.

From these studies it can be seen that the bias adjustment factor (A) of 0.86 has therefore to be applied (multiplied) to the diffusion tube results for the 2023 data as shown in Table C.3.

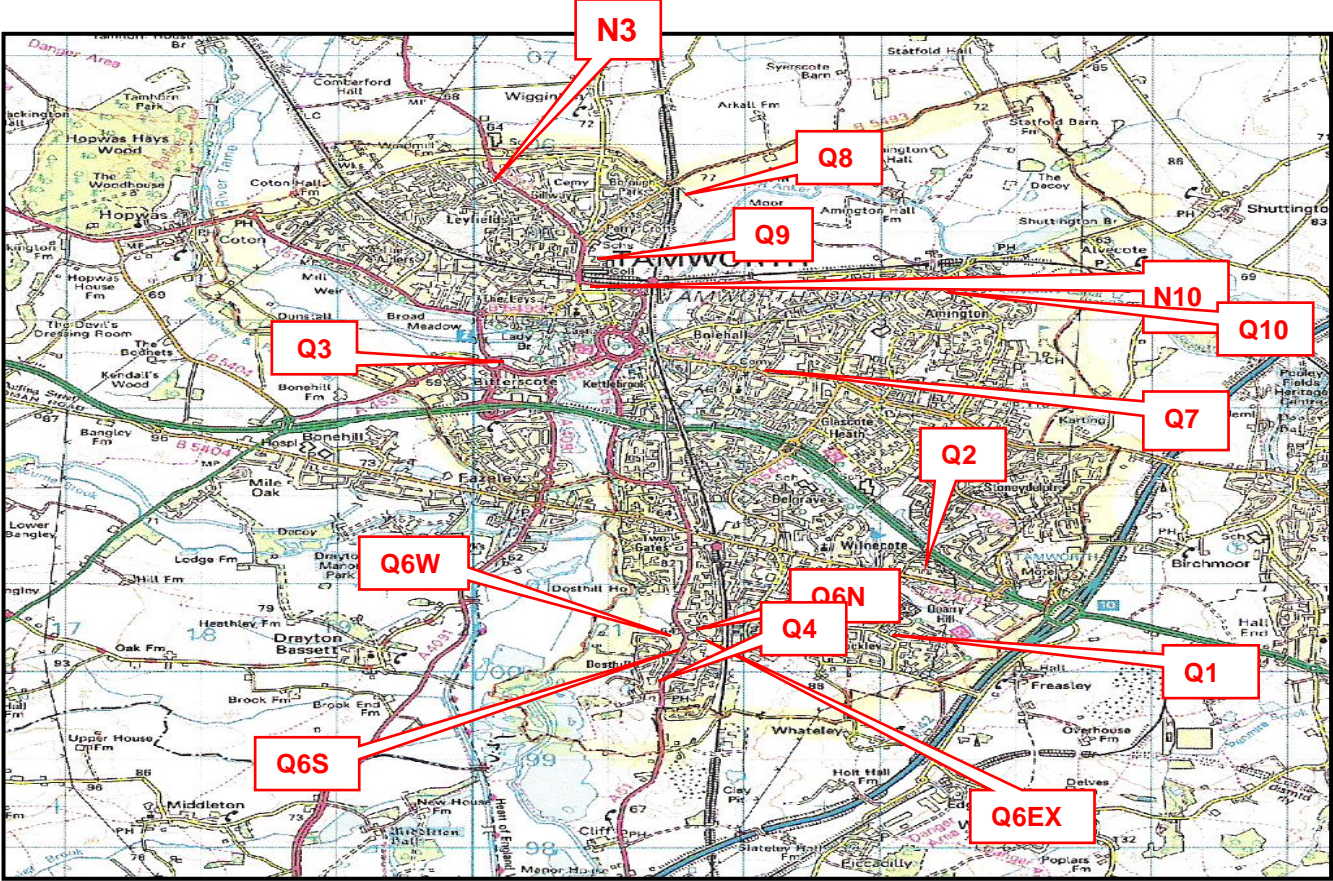
Table C.3

Bias Adjustment Factors for Staffordshire Scientific Services 2023

National Diffusion Tube Bias Adjustment Factor Spreadsheet							Spreadsheet Version Number: 03/24			
<p>Follow the steps below in the correct order to show the results of relevant co-location studies</p> <p>Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods</p> <p>Whenever presenting adjusted data, you should state the adjustment factor used and the version of the spreadsheet</p> <p>This spreadsheet will be updated every few months: the factors may therefore be subject to change. This should not discourage their immediate use.</p>								<p>This spreadsheet will be updated at the end of June 2024</p> <p>LAQM Helpdesk Website</p>		
The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory.						Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.				
Step 1:	Step 2:	Step 3:	Step 4:							
Select the Laboratory that Analyses Your Tubes from the Drop-Down List	Select a Preparation Method from the Drop-Down List	Select a Year from the Drop-Down List	<p>Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution.</p> <p>Where there is more than one study, use the overall factor¹ shown in blue at the foot of the final column.</p>							
If a laboratory is not shown, we have no data for this laboratory.	If a preparation method is not shown, we have no data for this method at this laboratory.	If a year is not shown, we have no data ²	If you have your own co-location study then see footnote ⁴ . If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953							
Analysed By ¹	Method <small>To undo your selection, choose (All) from the pop-up list</small>	Year ² <small>To undo your selection, choose (All)</small>	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m ³)	Automatic Monitor Mean Conc. (Cm) (µg/m ³)	Bias (B)	Tube Precision ³	Bias Adjustment Factor (A) (Cm/Dm)
Staffordshire Scientific Services	20% TEA in water	2023	R	Wigan Council	12	26	21	21.2%	G	0.82
Staffordshire Scientific Services	20% TEA in water	2023	UB	Salford City Council	11	22	20	8.2%	G	0.92
Staffordshire Scientific Services	20% TEA in water	2023	UB	Salford City Council	12	13	12	4.7%	G	0.96
Staffordshire Scientific Services	20% TEA in water	2023	R	Salford City Council	12	39	33	15.2%	G	0.87
Staffordshire Scientific Services	20% TEA in water	2023	KS	Manchester City Council	12	48	43	11.7%	G	0.90
Staffordshire Scientific Services	20% TEA in water	2023	UC	Manchester City Council	12	28	27	6.0%	G	0.94
Staffordshire Scientific Services	20% TEA in water	2023	SI	Manchester City Council	12	17	15	12.1%	G	0.89
Staffordshire Scientific Services	20% TEA in water	2023	KS	Maplebone Road intercomparison	11	50	38	31.8%	G	0.76
Staffordshire Scientific Services	20% TEA in water	2023	R	Stoke-on-trent City Council	12	50	37	35.4%	G	0.74
Staffordshire Scientific Services	20% TEA in water	2023	R	Stoke-on-trent City Council	12	53	44	20.8%	G	0.83
Staffordshire Scientific Services	20% TEA in water	2023	UB	Stoke-on-trent City Council	12	21	18	16.6%	G	0.86
Staffordshire Scientific Services	20% TEA in water	2023		Overall Factor¹ (11 studies)					Use	0.86

Appendix D: Map(s) of Monitoring Locations

Figure D.1 – Map of Non-Automatic Monitoring Site



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NB The TAM Q6E site has been moved to 118 Highcliffe Rd and is now called TAM.6QEX

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England⁸

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

⁸ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Appendix F: Processes Regulated for Emissions to Air by Tamworth Borough Council under the Environmental Permitting (England & Wales) Regulations 2016 as at August 2023

Ref No	Operator Name	Process Address	Post Code	Process Description
Part A2				
P01	Forterra Building Products Ltd	Wilnecote Brick, Hedging Lane, Wilnecote	B77 5EU	Manufacture of heavy clay goods. (Brickworks)
Part B				
P03	Envirostrip (GB) Ltd	Unit 11, 12 and 12a Hedging Lane Industrial Estate	B77 5HH	Ferrous Metal
P06	Envirostrip (GB) Ltd	Warwick House, Watling Street, Wilnecote	B77 5BH	Metal decontamination by the application of heat
P02	Breedon Southern Ltd	Mica Close, Tamworth,	B77 4DS	Concrete batching plant
P09	Apollo Chemicals Limited	Sandy Way, Amington Industrial Estate	B77 4DS	Manufacture of solvent borne adhesives and solvents
P11	Sainsbury's Supermarkets Ltd	Sainsbury's Supermarkets Ltd, Bitterscote	B78 3HD	Unloading of petrol into stationary storage tanks
P12	William Morrisons Supermarkets Ltd	William Morrison Supermarket Plc, Hilmore Way	B77 2NY	Unloading of petrol into stationary storage tanks
P13	Tamworth Service Station	Tamworth Service Station, Upper Gungate	B79 7NU	Unloading of petrol into stationary storage tanks
P14	Tesco Stores Ltd	Dosthill Service Station, High Street, Dosthill	B77 1LE	Unloading of petrol into stationary storage tanks
P15	Fuel Centre Ltd	Wilnecote Service Station, Watling Street, Wilnecote	B77 5AB	Unloading of petrol into stationary storage tanks
P22/10	Roadside Welcome	78 Glascoate Rd, Tamworth, B77 2AF	B77 2AF	Unloading of petrol into stationary storage tanks
P20	Asda Stores Ltd	Ventura Road	B78 3HD	Unloading of petrol into stationary storage tanks
P21	Stormking Plastics Ltd	Amington Point, Sandy Way, Amington	B77 4ED	Processes for the manufacturer of fibre reinforced plastics

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 Highways England
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.