IPSWICH
BOROUGH COUNCIL

2026 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, 2026

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Local Responsibilities and Commitment

This ASR was prepared by the Public Protection Department of Ipswich Borough Council with the support and agreement of the following officers and departments:

Public Protection, Ipswich Borough Council

- Principal Environmental Health Officer (Environmental Protection)
- Environmental Health Officer (Environmental Protection)

Planning and Development, Ipswich Borough Council

- Head of Town Planning and Development
- Planning Policy Team Leader

Culture and Environment, Ipswich Borough Council

- Climate Change Project Officer

Growth, Highways and Infrastructure, Suffolk County Council

- Transport Policy & Development Manager
- Senior Principal Transport Planner
- Behaviour Change Manager

Public Health and Communities, Suffolk County Council

- Project Lead, Place Making, Natural Environment and Climate

This ASR has been approved by the Assistant Director for Communities (Ipswich Borough Council).

Kate Price

Assistant Director for Communities

Ipswich Borough Council

This ASR has been signed off by an Executive Director of Public Health (Suffolk County Council).

Stuart Keeble

Executive Director of Public Health, Communities and Public Safety

Suffolk County Council

If you have any comments on this ASR please send them to Public Protection at: Ipswich Borough Council, Grafton House, Ipswich, Suffolk, IP1 2DE

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Executive Summary: Air Quality in Our Area

Air Quality in Ipswich 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.

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

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

Table ES 1 - Description of Key Pollutants

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

In order to comply with its duty to review the air quality within its area, Ipswich Borough Council (IBC) monitors nitrogen dioxide (NO_2) levels within the town using one automatic monitor located on St Matthews Street and a total of 87 diffusion tubes positioned at 79 carefully selected locations across the borough. Changed and analysed on a monthly

basis, the diffusion tubes provide a measure of how nitrogen dioxide levels vary over time and the data is used to calculate an annual mean concentration at each monitoring location. Once corrected for experimental bias and adjusted to take into account the location of the tubes relative to any likely human exposure, these annual values should not exceed the national air quality objective level of 40µg/m^3. In the event that this level is, or is likely, to be exceeded on a consistent basis Local Authorities have a legal duty to declare an Air Quality Management Area (AQMA) encompassing the relevant locations. Both nationally and locally the main source of high levels of nitrogen dioxide is road transport.

Currently, Ipswich Borough Council has a total of three AQMAs, all due to continued exceedance of the annual mean NO_2 objective level:

- *Ipswich AQMA No. 2* - From the junction with Peel Street, extending along Crown Street, St Margarets Street and St Helens Street to the junction with Palmerston Road, and from St Margarets Street extending up Woodbridge Road to just beyond the junction with Argyle Street. (declared 2006; amended 2017); Shown at Figure D2
- *Ipswich AQMA No. 3* - Encompassing the land in and around College Street, Key Street, Salthouse Street, Fore Street, Star Lane, Neptune Square and Grimwade Street. (declared 2006; amended in 2017 and 2021); Shown as Figure D3
- *Ipswich AQMA No*. 5 - Incorporating the land in or around St. Matthews Street / Norwich Road between the Civic Drive roundabout and Bramford Road (declared 2017). Shown as Figure D4

Further information on the above AQMAs (including maps showing their location and boundaries) is available on Ipswich Borough Council's AQMA webpage on the DEFRA website.

As per the guidance in LAQM.PG 22 the Council has revised its Air Quality Action Plan (AQAP). The updated 2025 – 2030 AQAP was published in May 2025.

Figures A.1 – A.11 shows bias corrected trendline plots for clusters of passive monitoring locations in and around each of the three AQMAs. Despite AQMA 4 being revoked in August 2021, and AQMA 1 being revoked in January 2025, they are included for transparency to help demonstrate that it was appropriate to revoke the AQMAs due to continued NO_2 concentrations under the national objective level.

When looking at the bias corrected data for 2025, annual mean NO_2 concentrations have, for the majority of sites, marginally decreased compared to the previous three years. It is possible that people's travel behaviour has permanently changed (e.g. greater working from home and increased flexible working times, avoiding rush hour commuting) since the relaxation and removal of Government restrictions associated with the COVID-19 pandemic, hence why concentrations have generally remained below 2019 pre-pandemic levels. Further changes to emissions will be reported on in subsequent ASR's.

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.

Development and implementation of Local Ipswich Cycling and Walking Infrastructure Plans (LCWIP), and work to improve existing cycle routes

Ipswich Borough Council's LCWIP was formally adopted by Full Council on 16th July 2025. The purpose of the Ipswich LCWIP is to increase the uptake in walking, wheeling and cycling. Improving the paths, roads and streets in Ipswich to encourage more walking, wheeling and cycling for everyday journeys will have the following benefits:

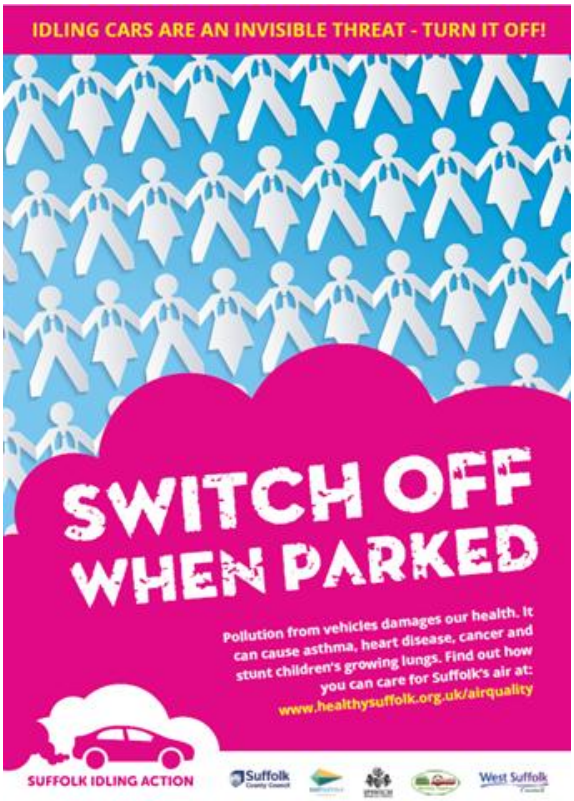
- reducing congestion on the roads;
- benefitting the local economy, such as supporting a Vibrant Town Centre;
- mitigating climate change;
- improving air quality;
- improving health and wellbeing; and
- making more attractive and community-focused places in which to live.

Revocation of Air Quality Management Area (AQMA) 3

Due to a continued absence of exceedances of the annual mean NO_2 objective level in AQMA 3, the Council intend to revoke AQMA 3. A copy of the Detailed Assessment supporting the revocation of AQMA 3 is attached to Appendix E.

Ongoing commitment to Suffolk Anti-idling campaign

The Council continues to support the Suffolk-wide Anti-Idling Campaign, delivering targeted engagement and awareness-raising activity to reduce unnecessary vehicle emissions. During 2025, a programme of engagement events was undertaken, including activities outside schools during Walk to School Week and an anti-idling event at Ipswich Hospital in conjunction with Clean Air Day.



Campaign materials have been refreshed to place greater emphasis on health impacts, and the range of resources available has been expanded. Schools, businesses and community groups are now able to access free anti-idling materials, including banners, outdoor signage, posters, car stickers, leaflets and 'myths and facts' postcards, supporting wider community engagement and behaviour change.

Delivery of Bus Service Improvement Plan

Department for Transport funding, from the Local Authority Bus Grant, has been made available to Suffolk County Council in the form of a three-year funding settlement starting from 1 April 2026. The total available for that three-year period will be £24m split almost evenly £12m each for revenue and capital.

Conclusions and Priorities

Once bias adjusted using the national factor and distance corrected, the nitrogen dioxide diffusion tube data for 2025 shows that one site was recorded within 10% of the annual mean NO_2 objective level. This site was located within AQMAs 5. Due to the inherent uncertainty in diffusion tube monitoring data, this site is considered an exceedance of the annual mean objective level for NO_2 under the Local Air Quality Management (LAQM) Framework.

Although the continuous monitor at St Matthew Street achieved a high data capture rate in 2025 (>75%), the national bias correction factor (0.78) was applied to the 2025 diffusion

tube results instead of the locally derived factor (0.75), as it provided a more conservative assessment, giving confidence in the data presented. Further details on this are given in Appendix C. Had the Council applied the local correction factor to the data, no sites would be within 10% of the annual mean NO_2 objective level.

Due to a continued absence of exceedances of the annual mean NO2 objective level in AQMA 3, the Council intend to revoke AQMA 3. A copy of the Detailed Assessment supporting the revocation of AQMA 3 is attached to Appendix E.

The Council has several key challenges/priorities for addressing air quality over the forthcoming reporting year. These include:

- To work towards implementing the measures in the Air Quality Action Plan.
- The potential revocation of AQMA 3. Defra's appraisal of the Detailed Assessment for AQMA 3 is pending. If approved, the Council will launch a public consultation on the proposed revocation.
- The continued delivery of the Councils 2020-2030 Climate Change Strategy and Action Plan. There are a number of actions within the strategy that will benefit air quality and will be priorities for the foreseeable future.
- The continued growth in housing development and business activity will be a major challenge when addressing air quality in the Borough. Ensuring all developments have suitable measures in place to mitigate against their impacts will be essential in ensuring air quality is maintained and improved in Ipswich; the Low Emissions SPD (adopted in November 2021) should assist with this.
- A further significant organisational change affecting air quality work in the coming year is the confirmed reorganisation of Suffolk's local authorities into three new unitary councils, replacing the existing district and borough structure. The Government approved this reorganisation in March 2026, following consultation across Suffolk and Norfolk. The new unitary councils—Central and Eastern Suffolk, Western Suffolk, and Ipswich and Southern Suffolk—will assume responsibility for all current local services.

  This structural change will require the alignment and consolidation of existing air quality management procedures, reporting processes, datasets, monitoring arrangements, and internal governance frameworks across the new authority areas. Work to harmonise these approaches will be a priority during the transition period,

and it is anticipated that full integration will take time as consistent policies and operational practices are developed and implemented across the new Council.

The Council will continue to monitor air quality across Ipswich as this is essential for informing our air quality work and developing measures that can provide potential improvements.

How to get Involved

The main source of air pollution in Ipswich is road traffic. We are working to meet the challenge set by the Government for NO_2, PM_{10} and $PM_{2.5}$ targets but it will also require a concerted public effort with each person doing their bit in order to try and increase active travel and reduce the use of the motor vehicle where possible. Below are a few suggestions on how to get involved:

- Try to use your car less. Walking and cycling are much cleaner, cheaper and healthier forms of travel. A map showing cycle routes across Ipswich is available on the Way to go Suffolk Website.
- Use public transport, such as the bus and train.
- If you have to use your car, you can reduce emissions by not idling when parked. You can also reduce emissions from your car by ensuring it is regularly serviced and by driving efficiently.
- Consider purchasing an electric vehicle. The Council is working to improve the local charging infrastructure across Ipswich. Electric vehicles are reducing in cost and technology is improving to make this technology more viable. See the Zap Map website for locations of charging points. If you opt to purchase a traditionally fuelled vehicle, consider the most fuel efficient petrol vehicle rather than buying a diesel vehicle.
- Consider car sharing to reduce emissions and save money. See the Liftshare website for details.
- Avoid having bonfires. If you do choose to have a fire, only burn dry garden waste and avoid burning on days that already have high pollution levels.

- Avoid burning solid fuel. If you do choose to burn solid fuel, always ensure the appliance is well maintained and fuel is clean and dry.

More information on air quality within Ipswich is available on the Ipswich Borough Council Air Quality Management website.

If you have any specific questions or concerns, or if you would like to make suggestions on possible improvements and/or supply additional air quality information, please contact Public Protection at Ipswich Borough Council on 01473 432000 or environmental.health@ipswich.gov.uk.

If you would like any further information on national air quality, including the latest news, air pollution forecasts, the latest measured levels and a summary, interactive monitoring, and general information about air pollution, consult the Defra website.

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1 Local Air Quality Management

This report provides an overview of air quality in Ipswich Borough during 2025. 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 Ipswich 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.

A summary of AQMAs declared by Ipswich Borough Council can be found in Table 2.1. The table presents a description of the three AQMAs that are currently designated within Ipswich. Appendix D: Map(s) of Monitoring Locations and AQMAs provides maps of AQMA(s) and also the air quality monitoring locations in relation to the AQMA(s). The air quality objectives pertinent to the current AQMA designation(s) are as follows:

- NO_2 annual mean less than 40µg/m^3;

Table 2.1 – Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Highest Concentration: Declaration	Highest Concentration: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Ipswich AQMA No.2	Declared 11/04/2006 Amended 12/09/2017	NO_2 Annual Mean	An area from the junction with Peel Street, extending along Crown Street, St Margarets Street and St Helens Street to the junction with Palmerston Road, and from St Margarets Street extending up Woodbridge Road to just beyond the junction with Argyle Street.	NO	45µg/m3	34µg/m3	1 year	Ipswich Borough Council Air Quality Action Plan 2025 - 2030.	Air Quality Action Plan 2025 - 2030
Ipswich AQMA No.3	Declared 11/04/2006 Amended 12/09/2017 Amended 19/08/2021	NO_2 Annual Mean	Encompassing the land in and around College Street, Key Street, Salthouse Street, Fore Street, Star Lane, Neptune Square and Grimwade Street.	NO	50µg/m3	30µg/m3	3 years	Ipswich Borough Council Air Quality Action Plan 2025 - 2030.	Air Quality Action Plan 2025 - 2030

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Highest Concentration: Declaration	Highest Concentration: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Ipswich AQMA No.5	Declared 12/09/2017	NO_2 Annual Mean	An area incorporating the land in or around St. Matthews Street / Norwich Road between the Civic Drive roundabout and Bramford Road.	NO	49µg/m3	37µg/m3	0 years*	Ipswich Borough Council Air Quality Action Plan 2025 - 2030.	Air Quality Action Plan 2025 - 2030

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

☒ **Ipswich Borough Council confirm that all current AQAPs have been submitted to Defra.**

* Under the Local Air Quality Management (LAQM) framework, nitrogen dioxide (NO_2) concentrations exceeding 36µg/m³ are considered exceedances. This threshold is within 10% of the annual objective of 40µg/m³ and accounts for the inherent uncertainty associated with diffusion tube monitoring data.

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

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

"On the basis of the evidence provided by the local authority the conclusions reached are accepted for all sources and pollutants. Overall, the report is well presented and follows the relevant guidance. The council should continue their good work in their 2026 ASR."

Main comments provided by the appraisal team included:

- "The ASR is generally well presented, however minor formatting errors are present throughout the document (i.e. subscripts, font style and sizing in tables, outstanding template text). As this is a public facing document, it is important that reports follow the template and are fully reviewed prior to publication". This has been addressed in the 2026 ASR submission.
- "Table A.7 states "N/A" relative to the 24-Hour mean PM10 data, rather than providing a value. No reasoning is given within the ASR for not presenting this data. Additionally, as data capture was <85%, the 90.4th percentile of the 24-hour means is required to be presented in this table also. This is required to be provided prior to acceptance of the ASR". The council subsequently provided the value and the 90.4th percentile in the 2025 submission. A value has been provided in the 2026 ASR.
- "In accordance with the monitoring data, there were exceedances of the annual average NO2 objective in AQMA 2 and AQMA 5. Table 2.1 and the relevant sections of the ASR need to be updated to reflect that the number of years of compliance is zero". This has been appropriately addressed in the 2026 ASR submission following analysis of the 2025 monitoring data.
- "Fall off with distance data has been presented in Table B.1 for some monitoring locations. Although this is not required at most of these locations, the methodology has not been presented". This has been addressed in the 2026 ASR submission, and the methodology for distance correction has been presented in Table C.4.
- "Comments are provided to clarify where data is missing and why in Table B.1. This is welcomed and should be included in future ASRs". This has been addressed in the 2026 ASR submission.

Ipswich Borough Council has implemented a new Air Quality Action Plan (AQAP) 2025 – 2030 which was approved by the Council in May 2025. Several measures were taken forward from the previous AQAP alongside a range of new measures. Details of all measures completed, in progress or planned are set out in Table 2.2. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2.

Measures within Table 2.2. are colour graded based on the results of cost benefit analysis, detailed in Section 6 of the Councils Air Quality Action Plan 2025 - 2030. The cost benefit analysis was informed by estimates of air quality impacts, feasibility and expected costs.

Ipswich Borough Council has taken forward a number of direct measures during the current reporting year of 2026 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2.

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

- Progression of the proposed revocation of Air Quality Management Area (AQMA) No. 3, following sustained compliance with the annual mean nitrogen dioxide (NO_2) objective. Defra has advised that it does not appraise Detailed Assessments submitted for AQMA revocation purposes. Defra's position is that, where annual mean NO_2 concentrations have been below 36 µg/m³ for three years or more (following distance correction where relevant), and a continuing downward trend is evident, local authorities are encouraged to proceed with AQMA revocation. Defra has confirmed that it will acknowledge receipt of the Council's Detailed Assessment without undertaking a formal appraisal and has advised that the Council may proceed with the preparation of an AQMA Revocation Order. Subject to completion of the required public consultation, the Revocation Order will be uploaded via the LAQM portal, in line with national guidance.
- Completion of the use of Ipswich Borough Council-procured Variable Message Signs (VMS) to promote air quality and anti-idling messages. The VMS infrastructure has been fully installed at a total project cost of £259,000. During the next reporting year, it is anticipated that anti-idling and air quality messages will be agreed and authorised for display, enabling the signs to be used to support public awareness and behaviour-change initiatives across Ipswich.

Ipswich Borough Council's priorities for the coming year are:

- To work towards implementing the measures in the Air Quality Action Plan.
- The potential revocation of AQMA 3.
- To work with officers implementing the Council's Climate Change Strategy to ensure a joined-up approach in tacking both climate change and air quality. There are several actions within the strategy that will benefit air quality and will be priorities for the foreseeable future.
- To continue to assess and comment on planning applications and major developments in relation to air quality. This is essential in order to ensure future emission reductions within the district, and to reduce the likelihood of additional AQMAs being declared and further deterioration of air quality in existing AQMAs
- To continue to deliver anti-idling events using the updated Suffolk anti-idling campaign materials.
- To develop and implement a campaign to raise awareness on indoor air quality, including supporting work outlined in the SCC Suffolk Air Quality Strategy, with particular focus on properties within the AQMAs.

Ipswich Borough Council worked to implement these measures in partnership with the following stakeholders during 2025:

- Suffolk County Council – Public Health, Highways
- Neighbouring district and borough councils in Suffolk
- The University of Suffolk
- SNEE (Suffolk and North-East Essex) ICB (Integrated Care Board)

The principal challenges and barriers to implementation that Ipswich Borough Council anticipates facing are:

- Limitations on the level of dedicated resource available for air quality management activities; and
- Difficulty in obtaining sufficient support to include potentially more intrusive and/or costly interventions to secure significant and necessary improvements in air quality throughout the AQMAs.
- The transition to the new Suffolk unitary council structure, which will require harmonisation of air quality functions, policies, procedures, and monitoring/reporting systems across the newly formed council areas, creating short-term operational and strategic challenges during the reorganisation period.

Progress on the following measures has been slower than expected:

- Work with other Bus Operators in the town to encourage the renewal of their fleets – The current economic climate and limited funding from Government has meant that the operators have very little spare funding to invest in new fleet.
- Progress in deploying air quality messaging on Council-owned Variable Message Signs has been slower than initially anticipated. While all VMS units have now been successfully installed, the introduction of anti-idling and air quality messages is subject to internal approval processes, including agreement with the Council's Directors to ensure consistency with wider communications and transport objectives. Once approved, messaging will be displayed as part of the Council's ongoing air quality and public engagement work.
- Supporting, where appropriate, the measures identified in the Ipswich Strategic Planning Area (ISPA) Transport Mitigation Strategy – This was a measure included within the previous AQAP, and not much further progress has been made on this since the last ASR. All of the ISPA authorities are working on updating their Local Plans, supported by new highways evidence, to reflect new challenging housing targets. It is envisaged that this will require a new mitigation strategy, but this will still be based primarily on modal shift to sustainable transport.

Ipswich Borough Council anticipates that the measures stated above and in Table 2.2 will achieve compliance in all AQMAs by:

- 2030 within AQMA No.2
- 2027 within AQMA No.3
- 2030 within AQMA No.5

Table 2.2 – Progress on Measures to Improve Air Quality

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
Priority Air Quality Actions														
15 (high priority)	Delivering air quality improvements through the planning system. Includes ongoing delivery of the Local Plan and Low Emissions SPD	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2025	2030	Ipswich Borough Council	Ipswich Borough Council	Funded	£10-50k	Implementation	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled. Est 1-5ug/m3.	Ongoing implementation of policy	Ongoing implementation of policy	
3 (medium priority)	Ongoing commitment to promoting the Suffolk anti-idling campaign	Other	Other	2025	2030	Ipswich Borough Council Suffolk County Council	Ipswich Borough Council Suffolk County Council	Funded	<£10k	Implementation	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled, est. <0.5µg/m3	Number of anti-idling events attended. Monitored and reviewed via IBC's Environmental Protection Department	Campaign materials previously produced by the Suffolk Air Quality Working Group. Internal staff within Environmental Health and Waste Operations have been given anti-idling training. A number of anti-idling events have been held outside schools. In 2025, 2 anti-idling events were planned for walk to school week, and another took place at Ipswich Hospital in conjunction with Clean Air Day. Suffolk Idling Action Campaign resources have been updated to include more of a focus on health messaging. The range of materials has been expanded and schools, businesses and community groups are able to request free resources including banners, outdoor signage, posters, car stickers, leaflets and myths and facts postcards. A number of resources have also been developed for specific use at train stations and level crossings, in partnership with East Suffolk Lines Community Rail Partnership. Implementation on-going.	
4 (medium priority)	Expansion of air aware schools toolkit to further raise awareness of air quality in schools, particularly schools near AQMAs	Public Information	Other	2025	2030	Ipswich Borough Council	Ipswich Borough Council Suffolk County Council have funded the school streets project	Funded	<£10k	Implementation	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled, est. <0.5µg/m3.	Present information to schools near AQMAs and within the borough. Monitored and reviewed via IBC's Environmental Protection Department Awareness levels of the impacts of idling from SCC obtained data	IBC have produced an 'Air Aware Ipswich' Schools Toolkit. A 12 week programme aimed at raising awareness of air quality issues with school children. This has been adapted from initiatives used in London and Oxford. This is available at: https://www.ipswich.gov.uk/content/air-quality-resources-schools. SCC have a School Streets Policy. Ranelagh Primary School and Morland VA Road both have school streets. Ranelagh Primary school street launched on the 4th of January 2024, and Paul's Road immediately became a pedestrianised area, with parents accepting the new rules on the first day, with overwhelmingly positive comments received from the community. 1 month following the launch of the scheme, feedback demonstrated that 85% of pupils believed Paul's Road is a safer place since the scheme started and 60% believe the air is now cleaner. Air quality monitoring has also demonstrated a drop in approximately 1.4ug/m3 of both PM10 and PM2.5. Since December 2024, the London Road end of the scheme now has removable bollards, therefore through traffic is not permitted at any time. Feedback from parents/carers were sought out in April 2025:	

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
													• 84% of respondents stating that they felt completely/mostly safe on Paul's Road. • Positive comments were also received, with one parent stating they now let their child walk to school alone as they are no longer worried about dangerous driving. • Pupils from the school also stated that they feel the air is cleaner because there are not as many cars on the road, and they don't have to rush or worry about the traffic. • The scheme was made permanent in October 2025. Morland school street launched on the 4th of September 2024. The barriers are marshalled by a combination of staff and parent volunteers. A survey was completed in March 2025: 83% of parent/staff respondents agreed that it improved road safety outside the school, 63% of parent/staff respondents agreed that there was an improvement in congestion and traffic outside the school and 90% of parent/staff respondents wanted the scheme to be made permanent. The scheme was made permanent in June 2025. A walking bus at Hillside Primary School launched in December 2025, led by parent volunteers from the school. . 5 schools in Ipswich are accredited with Modeshift stars: Chantry Academy – Approved Woodbridge Road Academy – Approved Ipswich School – Approved Ranelagh Primary School - Approved Castle Hill Infant and Junior School – Good Northgate High School and Ormiston Endevaour Academy participated in the Modeshift Active Travel Ambassador Programme: Pupils pitch to judges to secure funding for school active travel campaigns - Suffolk County Council At this time of writing this report, officers are currently planning visits to schools for both Walk to School Week and the week of Clean Air Day. Visits will likely involve a presentation on air quality and an anti-idling event.	
1 (medium priority)	Development and implementation of Local Ipswich Cycling and Walking Infrastructure Plans (LCWIP), and work to improve existing cycle routes	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2025	2025	Ipswich Borough Council/ Suffolk County Council	IBC Officer Resource, DfT Active Travel Fund, Developer Funding, External funds	Partially Funded	>£10 million	Planning	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled – est. 1-5µg/m3	Implementation of Walking and Cycling Plan	Ipswich Borough Council's LCWIP was formally adopted by Full Council on 16th July 2025. SCC delivered the following improvements in the financial year 25/26: • Bridge Street / Stoke Bridge crossing improvements - one of the most heavily used pedestrian routes in the town - to put the pedestrian / cycle crossings on the desire line to the Waterfront • Upper Brook Street - footway widening, removing on street parking and creating space for additional cycle parking and seating •Woodbridge Road – Heath Road to Beech Road – scheme currently paused. Schemes planned to be completed in 26/27 financial year: •Ipswich Hospital to the Waterfront •Park Road parallel crossing	The availability of sufficient funding is a barrier to implementation for both the Suffolk and Ipswich LCWIPs. Furthermore, other Suffolk active travel schemes higher in the priority order may be a barrier to implementing some Ipswich schemes.

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													•Nacton Road – Maryon Road to Felixstowe Road •Princes Street – Ranelagh Road to Civic Drive •Sidegate Lane (West) – footway improvements Prince Philip Bridge - New walking, wheeling and Cycling route around Ipswich Waterfront, including bringing into public use the swing bridge over the lock and a new route through the 'island site' Design nearing completion, phase 1 (Eastern Approach) set to commence Summer 2026. A further £2.1m of capital funding has been allocated to SCC for improvements across the county, some of which will be invested in Ipswich. SCC have some S106 funding that has come in from the Ipswich Garden Suburb Scheme although these are the first of a number of payments linked to trigger points The Suffolk County Council Local Transport Plan, Area Transport Plans and Local Cycling, Walking and Infrastructure Plan have just been adopted and can be found here – Implementation plans	
2 (medium priority)	Develop Local Transport Plan (LTP4) to create a more efficient use of the highway in and around the town, and across Suffolk	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2025	Adoption Spring 2025	Suffolk County Council	Various including; DfT, ATE, Developer Contributions, CIL	TBC, SCC receives annual block grants, but anticipate longer term funding settlements in the future	>10 million	Planning	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds. LTP4 include specific objectives around AQ Not modelled – est. 1-5µg/m3	Implementation of LTP	Suffolk's Local Transport Plan 2025 - 2040 is a 15-year strategy that highlights SCC's long-term ambitions for the transport network: Suffolk's Local Transport Plan 2025 - 2040 - Suffolk County Council This is supported by 15 implementation plans which set out how the council is proposing to address the issues identified within the longer-term transport strategy: Implementation plans - Suffolk County Council In addition to this SCC have drafted a new Rural Transport Plan outlining the approach to enhance rural mobility through active travel, passenger transport, and shared mobility infrastructure and services. The plan includes a shopping list of potential schemes, which local communities might consider funding through any local funding opportunities or for developers to include in any mitigation packages associated with significant housing and employment growth in villages and coastal communities: Rural-Area-Transport-Plan.	Individual schemes may require statutory consultation, and be subject to change, but the LTP4 set out a long term vision, to 2040, and isn't dependant on individual local schemes.
5 (medium priority)	Promote the Councils Green Travel Plan to employees, including use of agile working	Promoting Travel Alternatives	Workplace Travel Planning	2025	2030	Ipswich Borough Council	Ipswich Borough Council	Funded	Travel plan balances its own costs from staff parking charges	Implementation	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled, est. <1 µg/m3	Annual promotion of travel plan. Increase (self-reported) in the number of IBC staff walking, cycling or traveling sustainably to work via the Suffolk-wide travel to work survey results	Staff travel plan promoted on the intranet. A large proportion of staff are 'hybrid working', dividing their working time between home and the office, thereby reducing the number of commuting trips. 174 IBC staff responded to the 2025 travel to work survey. Staff use the following modes of transport for the longest parts of their journey: Bus – 14.37% Car Driver (single occupant) – 50% Car driver with a passenger/car share – 6.90.% Car passenger – 2.30% Cycle/electric cycle – 4.02% Motor cycle/moped/motor scooter – 0% Park and ride – 0% Train – 7.47% Walk/wheel – 14.94% N/a - currently working at home – 0%	

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													None of the above – 0% The majority of staff who completed the survey travelled to work either 1-2 days a week and worked at home the remainder of the week. Dr Bike sessions promoted to employees to enable their bikes to be checked and maintained by a competent mechanic. Free use of Ipswich Buses to all IBC employees. Beestons buses has now re-joined the Council's staff Green Travel Plan meaning employees can save 75% on the cost of getting to/from work when using a bus from their fleet (operate routes from Hadleigh and Hintlesham).	
6 (medium priority)	Support air quality events such as Clean Air Day and Clean Air Night	Public Information	Other	2025	2030	Ipswich Borough Council	Ipswich Borough Council	Funded	<10k	Implementation	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled, est. <0.5µg/m3	Participation in Clean Air Day and Clean Air Night events	Clean Air Day 2025 involved engagement with schools and anti-idling events. A webinar was also delivered to healthcare professions at Ipswich Hospital and Environmental Health hosted an information stall in partnership with SCC Public Health and staff at Ipswich Hospital and East Suffolk Council. This offered educational materials, children's activities and advice on reducing pollution and personal exposure. An anti-idling event was also held at the hospital, encouraging drivers to switch off their engines while stationary. Officers also published information relating to the Defra grant funded domestic burning campaign. At the time of writing this report, officers are currently planning this year's Clean Air Day which will be reported on in the 2027 ASR. Air Quality presentations in Primary Schools are planned, in addition to at the 10th Ipswich Guides.	Extent of campaign limited by budget available
7 (medium priority)	Investigate the feasibility of promoting air quality messages on IBC procured variable message signs around Ipswich	Public Information	Other	2025	2030	Ipswich Borough Council	Ipswich Borough Council	Funded	£100k - £500k (signs already purchased and installed)	Implementation	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled, est. <0.5µg/m3	Promote anti-idling messages quarterly Increased awareness of the impacts of idling from SCC obtained data	VMS project cost £259,000. All VMS had been installed. Anti-idling messages have been drafted. Awaiting agreement from the Councils Directors before being displayed.	Once wording of messages agreed, ongoing promotion of messages, hence completion date listed for lifetime of AQAP
8 (medium priority)	Promotion of travel alternatives e.g. walking, cycling, public transport (including park and ride), car sharing & air quality matters. Measure includes: Development and implementation of the Ipswich Air Aware Campaign.	Public Information	Other	2025	2030	Ipswich Borough Council, Suffolk County Council	Ipswich Borough Council, Suffolk County Council	Partially funded	<£10,000	Implementation	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled, est. <0.5µg/m3	Website patronage, number of Facebook posts/comments, number of video views Air quality messages being displayed KPI monitored by the IBC communications department and also by the relevant departments at Suffolk County Council.	In 2020, SCC worked with borough and district councils to develop the Suffolk Air Quality Profile, published in 2021, with the aim of increasing local knowledge, identifying areas of concern and making recommendations on what could be done to mitigate the impact of poor air quality. This led to the Suffolk Health and Wellbeing Board making air quality a priority. The recommendations from the Suffolk Profile have informed the development of a Suffolk wide Air Quality Strategy, published in May 2023 and updated in April 2025. It was developed in partnership between Suffolk County Council's Public Health and Communities directorate and the Growth, Highways and Infrastructure directorate, with contributions from district and borough councils, NHS and the University of Suffolk. The Strategy sets out actions important to the improvement of air quality in Suffolk, identifying the lead authority for the work, timescales, and what will be achieved.	

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													A strategy review and update took place at the end of 2024. Updates include an increased focus on indoor air quality, reflecting advances in data and evidence on the impacts of poor indoor air quality on health; action to support more nature friendly farming through Suffolk's County Farms Programme; and an evaluation project with the University of Suffolk looking at the impacts of school streets on Suffolk children's health. The updated action plan, which is available at healthysuffolk.org.uk/airquality (under strategy and plans), is part of SCC's ongoing commitment, working with partners, to improve air quality in pollution hotspots and subsequently improving the health and wellbeing of residents and visitors alike. A Suffolk Air Quality Community Engagement Plan was also produced. The Community Engagement Plan also includes engaging with the public on sustainable transport issue to try and encourage modal shift. Ipswich now has two School Streets in place, one at Ranelagh Primary School and one at Morland Primary School. Both Ipswich School Streets have demonstrated an increase in those walking and cycling to their respective schools. Consultation has completed for a further School Street at Whitehouse Primary with one additional consultation planned for a potential school street elsewhere in Ipswich In Suffolk: - 154 e-bike trials undertaken. - Regular weekly attendance at walking and cycling groups in Ipswich of approx. 70 individuals participating in Active Travel Social Prescribing Pilot. - Ranelagh primary school first Ipswich school to sign up for free bike loan scheme for years 5 & 6 pupils in summer 2025. The free bikes are combined with learn to ride sessions and learn to fix sessions (to include parents / carers) as well as the standard Bikeability L1/L2 training. - Scheme launched for parents / carers to trial a cargo bike for the school run. In progress, county wide, additional bikes being purchased due to popularity of trial. - 3 Cargo bikes being used around the county for business trials. Little uptake at present. - 3960 year 5 & 6 students trained in Bikeability Levels 1 and 2 in 25/26.. - 1st January - 31st December 2025: 3,000 active users/ 4,500 new users to the Way to Go Suffolk website. Last Mile Deliveries: Business plan being put in place for an Ipswich last mile delivery scheme. Working towards launch in March 2027. In December 2025 SCC was awarded more than £12 million over four years by Active Travel England to continue its work promoting sustainable travel. A total of £12,537,098 for the period 2026/27 to 2029/30 has been awarded to invest in footpaths, infrastructure, and cycle lanes. Free Wheels Project Planning for this project started in 2025 for launch in 2026. The project sees the loan of bikes to up to 400 year five students in the most deprived schools in Suffolk (all in Ipswich or Lowestoft,	

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													based on Public Health data). To date ten schools have been recruited, the bikes have been purchased, and distribution will begin in March 2026. Schools in Ipswich engaging with the project include Morland, Ranelagh, The Oaks, The Willows, Pipers Vale, Castle Hill and Hillside. Participating pupils will be required to undertake Bikeability Level 1 / 2 training and will be able to retain the bike until the end of year 6 when it will be returned, serviced and loaned to the incoming year 5s. In addition, parents / carers will be offered free bike maintenance courses and a month's free loan of an e-bike. A full project evaluation will be undertaken by the University of Bristol to assess the impact, which will take place between March 2026 and March 2027. Findings are expected to be available by June 2027. Community Walking and Cycling Hubs Hubs have been rolled out in 12 Suffolk locations in 2025 with a plan to reach a total of 28 locations by end of 2026. In addition, 12 x monthly bike fix sessions have been delivered in each of the following locations in 2025: Felixstowe Ipswich Lowestoft Haverhill Newmarket Brandon Bikeability figures: County-wide: 3900 places booked, 3250 delivered (the discrepancy is due to those who are ill / don't turn up on the day or who turn up with a cycle that is unsafe to ride). Department for Transport funding, from the Local Authority Bus Grant, has been made available to Suffolk County Council in the form of a three-year funding settlement starting from 1 April 2026. The total available for that three-year period will be £24m split almost evenly £12m each for revenue and capital. Suffolk rail prospectus launched which sets out the county's rail priorities over the next sixteen years and identifies interventions that will help support sustainable travel. Suffolk County Council have introduced a 20pmh speed limit policy has been introduced to allow communities to request 20mph areas to enhance road safety and improve travel-related quality of life.	
9 (low priority)	Procurement of low emission vehicles in Ipswich Borough Council Fleet	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	2025	2031	Ipswich Borough Council	Ipswich Borough Council	Funded	£1 million - £10 million	Implementation	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled, estimated NOx reduction of approximately 260.5 tonnes per annum if the fleet switches 100% to EV. Estimated a 6% reduction in PM2.5 if the fleet	Provision of new vehicles. Monitored and reviewed by the Council's Transport Manager	3-year replacement plan for small vehicle fleet to zero emission was concluded in 2022. However, the Council are committed to reducing emissions within the fleet. Currently within Ipswich Borough Council fleet currently breaks down as followed: EV Fleet = 38.20 % Ultra Low Emission = 42.50 % (Euro 6/6+) Low Emission = 18.80 % (Euro 5) High Emission = 0.50 % (Euro 4) The aim of the vehicle replacement plan is in line with the Councils Climate Change Strategy and Action Plan. This aims to reduce CO2 to net zero by 2030, with vehicles being zero emissions or as low as reasonably practicable by the same date. This will have the knock on benefit of eliminating	The Council are committed to reducing emissions within the fleet and the renewal programme (previously concluded in 2022) has been extended to a rolling programme, with phase one now due for completion in 2031. Half a million pounds has been set aside for fleet renewal each year.

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											switches 100% to EV. Calculations can be found in section 6 of the 2025-3030 AQAP.		exhaust emissions of nitrogen dioxide and particulate matter.	
10 (low priority)	Provision of EV charging points across IBC offices, Crown Street and Elm Street public car parks and investigate the feasibility of additional charging points across IBC car parks	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2025	2030	Ipswich Borough Council	Ipswich Borough Council	Partially Funded	£500k - £1 million	Completed	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled, est. <1 µg/m3	Provision of charging stations at IBC offices. Usage of EV charging points by the public Monitored and reviewed by the Councils Parking Services Department.	Number of charging points now installed at the following locations: Grafton House = 28 Layard House = 72 (inc 6 x 75kw DC (2 x Ringfenced to support RCV Charging), 1 x 22KW AC (Ringfenced currently to support RCV Charging) and 65 x 7KW AC) Christchurch Park = 9 Chantry Park = 4 Holywells Park = 2 Crematorium = 2 Gainsborough sports centre – 1 Crown Car Park = 28 Elm St Car Park = 1 unit (2 connectors) Upper Orwell Street North Car Park = 3 With regards to Suffolk as a whole, the Suffolk EV Infrastructure Strategy identifies the need to expand access to on-street charging facilities as one of the key enablers for the continued increase in EV ownership. In 2025 the first batch of charge point installations was completed by SCC's delivery partner Believ, providing 138 charge points, over 35 countywide sites. A further 38 sites (152 charge points) will follow in April 2026. The aim for 2026 is a total of 1,200 sockets so it is anticipated that build batches will be getting larger as the year progresses. To support the ever-growing shift to electric vehicles, Suffolk County Council is installing 6,000 on-street chargers over the next few years. Plug in Suffolk's aim is for every resident to be within a 5-minute walk or wheel of a charge point, allowing access across the whole county. To deliver the project, Suffolk County Council has received £6.7m from the Department for Transport through the Local Electric Vehicle Infrastructure (LEVI) Capital Fund.	Usage data for the period is partly unavailable due to the replacement of EV charging units and loss of access to the previous reporting portal. However, for Crown Street, data from the new units is available for 9 January 2026 to 15 April 2026, showing a total energy consumption of 9,706.311 kWh and total charging time of 1,438 hours, 51 minutes. Upper Orwell North Car Park had no usage, as the site was closed until December 2025 and chargers were not operational. New units are installed but awaiting sign-off. Elm Street new chargers are installed and awaiting sign-off. The previous units remained operational and experienced high usage while other sites were unavailable.
11 (low priority)	Work with Bus Operators in the town (i.e. Ipswich Buses, First, Norse, Beestons), to encourage the renewal of their fleet to cleaner i.e. Euro VI or better and/or low emission, hybrid buses, on certain routes	Vehicle Fleet Efficiency	Other	2025	2030	Suffolk County Council and Ipswich Borough Council	Bus Operators (plus other sources of funding)	Partially Funded	>10m	Implementation	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds A very basic calculation was estimated using current and projected fleet data from First Buses and Ipswich: If First buses upgrade their fleet to remove all Euro 4 buses, a 31% and a 36% reduction in NOx is estimated in	Reduced fleet emissions	First - The Current fleet profile is as follows: 5 x Euro 4, 6 x Euro 5, 40 X Euro 6. Any vehicle replacements will continue to move them towards lower emission standards although given the rural nature of routes and the current range limitations of electric vehicles these will be incremental and staged. We are actively looking at new technologies and battery improvements which we hope will present new opportunities in the near future. First are also continuing to partner with Ipswich Town FC to promote bus services and to offer free Park and Ride to ticket holders for some matches. Ipswich Buses – Ipswich Buses has continued its programme of fleet renewal during 2025 and into 2026, with air quality remaining an important consideration in vehicle replacement decisions. Since the previous update, the company has introduced further Euro VI vehicles into the fleet. During the 2025/26 financial year, seven Euro VI vehicles have joined the fleet, comprising three vehicles entering service between March and April	

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											AQMAs 2 and 5 respectively to from their overall fleet emissions. AQMA 3 is not considered as no buses from First operate past the worse case receptor. If Ipswich Buses upgrade their fleet to remove all Euro 3 and 4 buses, a 45%, 48% and a 46% reduction in NOx is estimated in AQMAs 2, 3 and 5 respectively to from their overall fleet emissions. Calculations can be found in section 6 of the 2025-3030 AQAP.		2025 and four further vehicles entering service in September 2025. Based on the current fleet list, the overall emissions profile is now as follows: Euro III x 5, Euro IV x 5, Euro V x 49, Euro VI x 16. Total fleet size: 75 A number of older vehicles are currently identified for disposal. The vehicles marked “TO GO” comprise five Euro III vehicles and two Euro IV vehicles. These vehicles are expected to be replaced with Euro VI vehicles, which would remove all remaining Euro III vehicles from the fleet and further improve the emissions profile. Following the disposal and replacement of those vehicles, the projected fleet emissions profile would be: Euro IV x 3, Euro V x 49, Euro VI x 23. Total fleet size: 75 The company therefore remains on course to remove the remaining Euro III vehicles from the fleet, subject to operational requirements, vehicle availability and delivery timescales. Fleet investment continues to be considered carefully due to the wider cost pressures affecting bus operators, including increased employment costs, insurance costs, vehicle purchase prices and uncertainty around future funding arrangements. The company must balance the environmental benefit of replacing older vehicles with the financial implications of disposing of fully depreciated assets and replacing them with newer, depreciating vehicles. The Board continues to support fleet replacement where funding and operational circumstances allow. A key part of the fleet replacement strategy remains improving air quality through the purchase of newer, cleaner vehicles wherever commercially viable. The company’s longer-term direction remains to reduce the number of older emission-standard vehicles and increase the proportion of Euro VI vehicles in the fleet. Current projections continue to be based on like-for-like service provision and do not account for any future service growth.	
12 (low priority)	Delivery of Bus Service Improvement Plan (BSIP)	Transport Planning and Infrastructure	Bus Route Improvements	2025	TBC	Suffolk County Council, Ipswich Borough Council Bus companies	TBC	Part Funded	>10m (£150k approx. for design work)	Planning	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled, est. >1µg/m3	Reduced Fleet Emissions	Department for Transport funding, from the Local Authority Bus Grant, has been made available to Suffolk County Council in the form of a three-year funding settlement starting from 1 April 2026. The total available for that three-year period will be £24m split almost evenly £12m each for revenue and capital.	
13 (medium priority)	Continue to explore the possibility and apply to DEFRA for grant funding under Air Quality Grant Scheme (if available) and any other appropriate funding	Public Information	Other	2025	2030	Ipswich Borough Council	Ipswich Borough Council	Funded	£100k - £500k	Implementation	Insufficient detail to quantify this measure. Reduction expected will depend on the grant project applied for.	Depends on the nature of the works relating to grant funding. Current grant project will be a reduction in domestic burning complaints. Reduced PM concentrations		
14	Continued implementation of	Promoting Low Emission Transport	Taxi Licensing conditions	2024	2027	Ipswich Borough Council	Ipswich Borough Council	Funded	<£10k	Implementation	Specific value not known but will contribute to overall reduction	Reduction in non-euro 6 diesel	Ongoing implementation	Future revisions to this policy are likely to include requirements for

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(low priority)	taxi licencing policy 2024-2027										in NO_2 levels in town centre and surrounds Not modelled, est. <1 µg/m3	Monitored and reviewed by the Councils Licencing Department		vehicles licensed as taxi and private hire in Ipswich to be zero or extremely low carbon emission.
16 (low priority)	Supporting, where appropriate, the measures identified in the Ipswich Strategic Planning Area Transport Mitigation Strategy developed by Suffolk County Council to support the Ipswich Strategic Plan Area (ISPA) local plans, works to be funded by the ISPA authorities	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2025	TBC	Suffolk County Council. IPSA authorities	IPSA authorities	Not Funded	Unknown	Planning	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds Not modelled. Est 1-5ug/m3.	Implementation of transport mitigation strategy	As all Local Planning Authorities in Suffolk are going through new Local Plan processes, and many places in Suffolk have similar congestion and air quality issues, the Ipswich Strategic Planning Area (ISPA) Officers Group has been expanded to cover the whole of Suffolk (as opposed to just the Ipswich area). SCC have recently commissioned KMC Consulting Engineers to review existing local and national policy and to come up with an approach to securing strategic mitigation from development. The report has been completed, and SCC are currently in discussion with the Borough and District Councils about adapting the current approach, and securing more sustainable transport mitigation, across Suffolk.	
17 (low priority)	Car Clubs & E Bike Hire Schemes	Sustainable Transport	Sustainable Transport	2025	Not known	Suffolk County Council, Ipswich Borough Council	Suffolk County Council, Ipswich Borough Council	Not funded	£800k+	Planning - Implementation dependant on funding	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds. Not modelled, est. <0.5µg/m3	Implementation of schemes	Two electric car clubs now in Ipswich – Two vehicles placed in Ann Street and two in Norfolk Road. Conversations taking place with Greater Anglia to try and get EV charging and car clubs nearer to railway stations to enable further rollout. E bikes - Discussions progressing slowly with Dott / Tier. No date set for potential scheme consultation / implementation but would be considered a useful enabler for the cargo bike last mile delivery service.	
18 (low priority)	Fleet Recognition Schemes	Vehicle Fleet Efficiency	Fleet efficiency and recognition schemes	2025	Not known	Suffolk County Council, Ipswich Borough Council	Suffolk County Council, Ipswich Borough Council	Not funded	TBC	Planning - Implementation dependant on funding	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds. Not modelled, est. <0.5µg/m3	Firms signed up to scheme	Measure feasibility being explored. Likely to remove from AQAP.	
19 (low priority)	Undertake pilot project to test 'micro-consolidation centre for distribution of commercial light goods	Freight and Delivery Management	Delivery and Service Plans	2025	Not known	Suffolk County Council, Ipswich Borough Council, Local Delivery Operators	Suffolk County Council, Ipswich Borough Council	Not funded	TBC	Planning - Implementation dependant on funding and suitable location	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds. Not modelled, est. <0.5µg/m3	Number of deliveries made by renewable means	Measure feasibility being explored. Likely to remove from AQAP.	Investigate the viability of incentivising sustainable modes of last mile delivery, given LGVs are dominant contributor sources in AQMAs
20 (low priority)	Assist the Councils Car Parking Services in the development of their policies and strategies to promote	Promoting Low Emission Transport	Other	TBC	TBC	Ipswich Borough Council	Ipswich Borough Council	Not funded	Not known	Planning	Specific value not known but will contribute to overall reduction in NO2 levels in town centre and surrounds.	Not known at this stage	A report is due to go to Executive in June which will propose further increases in parking tariffs. This could help to encourage the use of more sustainable modes of transport.	

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	clean travel and improved air quality. Review use of short and long stay car parks										Not modelled, est. <0.5µg/m3			
21 (No priority given as measure relates to CO^2 emissions)	Supporting where appropriate, Suffolk Climate Change, Environment & Energy Board's development and implementation of the Suffolk Climate Emergency Plan.	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2021	2030	Suffolk Climate Change, Energy & Environment Board (SCCEEB) reporting to Suffolk Public Sector Leaders (SPSL)	Suffolk Climate Change, Energy & Environment Board (SCCEEB) reporting to Suffolk Public Sector Leaders (SPSL)	Partially Funded	£1 million - £10 million	Implementation	- (Relates to CO2 emissions not NO_2)	See Plan for specific KPIs	**Suffolk Climate Action Community Match Funder:** Sustainable Suffolk has provided financial support for community renewable and energy efficiency projects and to groups providing energy efficiency advice and outreach. £150k in funding has been provided for projects totalling £524k in value. **Sustainable Schools Network:** 30 school energy audits have been completed, providing advice for staff on reducing energy consumption. Over 100 headteachers, operational, teaching and support staff in 80% of Suffolk's secondary schools have engaged in the project through events & training. A new website has been developed and launched to support staff to reduce energy consumption and engage with students: Suffolk Sustainable Schools Network **Specialist business support service:** 51 businesses across Suffolk have received in depth energy audits / specialist reports to help them reduce energy consumption. An additional 269 businesses have received light touch advice. This has led to savings from the project of 400 tCO2e and £230,000 to businesses. **Visitor economy support:** Wonderlust by Bus launched in November 2025 to provide opportunities for exploring Suffolk via the bus network instead of private vehicles. The interactive map can be viewed online at: www.wonderlustbybus.co.uk Residents and visitors to Suffolk can also pick up a copy of the map from more than 900 locations across the county, including libraries, local shops, rail stations, hotels and leisure centres. **Loft insulation:** 97 households have received 1,153 rolls of loft insulation, covering 3,637m^2 **Home Energy Efficiency Assessments:** Home | Suffolk Energy Efficiency Assessment Demand for assessments exceeds expectations. Of a total of 637 available assessments, 535 have been completed/booked. From a sample: 121 (30%) homeowners of 405 who have undertaken assessments have / will proceed with installations. Estimated annual carbon savings: 143,890 kg CO_2 **Warm Homes Loan:** The Warm Homes Suffolk Loan is an interest-free loan of up to £15,000 that can be used for energy efficiency upgrades. To date 250 loans for energy efficiency and renewable energy measures have been issued, with an average loan of £9,775: Suffolk Council - Lendology **Electric Car Clubs:** Nine Electric Vehicle Car Clubs have launched across Suffolk and are located in Bury St Edmunds, Hadleigh, Stowmarket, Needham Market, Sudbury, Woodbridge, Newmarket, Ann Street Ipswich and Norfolk Road Ipswich with two more on the way in 2026 (Lowestoft and Leiston). The first bookings have been made at all nine	Climate and air quality policies often overlap, so joint consideration will be essential to success in both areas

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													launched locations and to date the Car Clubs have just over 100 members and have completed over 15,000 combined miles. Plug In Suffolk Car Clubs - Sustainable Suffolk Active travel and EV experience day being planned at London Road Park and Ride site for October 26. EV cars from dealerships and attendance from active travel colleagues is being planned.	
22 (No priority given as measure relates to PM emissions)	Development and implementation of campaign to provide information about the impacts of domestic burning and good practice, including wood burners and burning of garden waste	Public Information	Other	2021	2024	Ipswich Borough Council	Ipswich Borough Council, DEFRA	Funded	£100k - £500k	Implementation	PM reduction not estimated but communications campaigns can increase awareness of air quality issues and drive behavioural change	Reduction in number of domestic burning complaints received. Reduction in PM concentrations Monitored and reviewed via IBC's Environmental Protection Department Increased awareness of the impacts of domestic burning from SCC obtained data	Information produced on IBC website relating to domestic burning. Bonfire complaint letters also updated with information. Social media posts produced alongside designs around winter burning. Information currently being collected on outdoor burning. Ipswich secured £115,632 from Defra as part of the 2021 Air Quality Grant Programme to run a monitoring and behavioural change campaign around domestic burning. Final messages being incorporated into information on indoor air pollution.	
23 (medium priority)	Ensure that point source industrial emissions are minimised through the Environmental Permitting process	Environmental Permits	Introduction/ increase of environmental funding through permit systems and economic instruments	Ongoing	Ongoing	Ipswich Borough Council	Ipswich Borough Council, operators of permitted processes	Funded. Cost recovery based on activity and applicable regulations	<£10k (Cost neutral)	Implemented	Not modelled, est. <0.5µg/m3	All permitted processes to be inspected at a frequency in line with their risk rating and suitable action taken for non-compliance. Monitored and reviewed via IBC's Environmental Protection Department as part of annual PPC returns to Defra.	All permitted processes being inspected in line with their risk rating and suitable action taken for non-compliance.	The Council charges for permits in line with the Environmental Permitted Regulations
24 (No priority given as measure relates primarily to non-NOx emissions)	Development and implementation of a campaign to raise awareness on indoor air quality, including supporting work outlined in the SCC Suffolk Air Quality Strategy, with particular focus on properties within the AQMAs	Public Information	Other	2025	TBC	Ipswich Borough Council, Suffolk County Council	Ipswich Borough Council, Suffolk County Council	Development and implementation of a campaign to raise awareness on indoor air quality, including supporting work outlined in the SCC Suffolk Air Quality Strategy, with particular focus on properties within the AQMAs	Unknown	Planning	Relates primarily to non-NOx emissions. Reductions not estimated but communications campaigns can increase awareness of air quality issues and drive behavioural change	Increased awareness of the health impacts of poor indoor air quality particularly including those living in AQMA's – SCC data The number of annual referrals to home efficiency schemes (such as Warm Homes Suffolk) and grants including those living in	Suffolk County Council (SCC) updated the Suffolk Air Quality Strategy at the end of 2024. This has an increased focus on indoor air quality and will be monitored by SCC with data shared with IBC where applicable. The updated action plan, which is available at healthysuffolk.org.uk/airquality (under strategy and plans), is part of SCC's ongoing commitment, working with partners, to improve air quality in pollution hotspots and subsequently improving the health and wellbeing of residents and visitors alike.	The type of energy efficiency retrofits provided depends on the property and resident; this will most likely be to heating insulation and ventilation but could also include other measures. The analysis team at Public Health Suffolk and Warm Homes Suffolk have confirmed a report can be run identifying the number of properties

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
												AQMA's – SCC data Number of visitors to the SCC Housing and Health webpages		specifically within the AQMAs that have undergone improvements. We are currently in the process of working with East Suffolk Council (who deliver Warm Homes Suffolk) and SCC to develop a data sharing agreement which will enable us to establish take up within the AQMAs and assist with further targeting.
25 (AQMAs 2 and 5) (Low priority)	Review opportunities for alterations to traffic management to reduce congestion in AQMAs, including the provision of red routes.	Traffic Management	UTC, Congestion management, traffic reduction	2025	Currently unknown	Suffolk County Council	Suffolk County Council	Not Funded	Unknown	Planning	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds. Not modelled, est. <1µg/m3	Reduction in congestion on Civic Drive/ St Matthews Street roundabout Reduction in NO_2 concentrations. Primarily monitored via diffusion tube monitoring	As part of a drive to better understand the contributing factors to Ipswich's AQMAs, Suffolk County Council commissioned Ricardo Consulting to develop a technical report. The report, finalised Summer 2025, explored the potential causes of the Ipswich Air Quality Management Areas and identified potential solutions for lowering pollution levels. The report identified that the key source of air pollution within the Ipswich AQMAs is road transport, primarily from diesel and petrol cars, light goods vehicles and buses. It was felt that it would be more beneficial to focus on reducing traffic and emissions than solely looking at traffic management measures. It was concluded that upgrading buses to electric and investing in active travel infrastructure to encourage more walking and cycling, would each reduce levels of harmful pollutants within the AQMAs. In addition, each could save an estimated £20million over the next 10 years in improved health outcomes, reduced demand on healthcare services, and economic benefits from reductions in sickness absence. This demonstrates that targeted actions to reduce transport-related pollution, even by modest amounts, can offer significant health and economic savings. Evidence within the report is now being used to inform ongoing transport strategy, the design and delivery of schemes, and support funding bids, where appropriate. Since 2023, annual NO_2 concentrations within AQMAs 2 and 5 have reduced on average by 2.7µg/m3 across the diffusion tube monitoring sites. The Councils automatic monitoring site located on St Matthews Street (IPS04), just outside the periphery of AQMA 5, has recorded a reduction of 2µg/m3 since 2023 suggesting a downward trend in concentrations.	No completion for this measure known. Possible mitigation dependant on funding and appropriate support from stakeholders. Likely that funding will be sought as and when opportunity arise, unless suitable funding agreement made available from other sources e.g. Defra or DfT.
26 (AQMA 5) (Medium priority)	Promote the use of Norwich Road Shoppers Car Park, short term parking bays behind businesses on Norwich Road. Incentivising use of allocated parking and enforcement against	Traffic Management	Other	2025	2030	Ipswich Borough Council	Ipswich Borough Council	Funded	<£10k	Implementation	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds. Not modelled, est. <0.5µg/m3	Reduction in congestion along Norwich Road/St Matthews Street. Number of penalty notices served – monitored by the Councils Parking Services Department.	Between 21/5/2025 – 16/04/25 the following number of PCNs were served along Norwich Road, St Matthews Street and St Matthews Street Service Road (North): 745. 1 PCN was issued in Norwich Road Shoppers Car Park for overstaying in the free parking bays. Since 2023, annual NO_2 concentrations within AQMA 5 have reduced on average by 2µg/m3 across the diffusion tube monitoring sites. The Councils automatic monitoring site located on St Matthews Street (IPS04), just outside the periphery of AQMA 5, has recorded a reduction of	

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
	unauthorised on street loading/ parking to assist with the reduction of congestion in the area.												2µg/m3 since 2023 suggesting a downward trend in concentrations.	
27 (AQMA 5) (Low priority)	Review (in conjunction with other IBC/ SCC work streams), the traffic management arrangements in the St Matthews St/ Norwich Rd corridor. Maintaining delivery facilities, whilst minimising disruption to traffic flows.	Freight and Delivery Management	Quiet & out of hours delivery	2025	Currently unknown	Suffolk County Council	Suffolk County Council	Not Funded	Unknown	Planning	Specific value not known but will contribute to overall reduction in NO_2 levels in town centre and surrounds. Not modelled, est. <1µg/m3	Reduction in congestion along Norwich Road & St Matthews Street. Reduction in NO_2 concentrations. Primarily monitored via diffusion tube and automatic monitoring	Since 2023, annual NO_2 concentrations within AQMA 5 have reduced on average by 2µg/m3 across the diffusion tube monitoring sites. The Councils automatic monitoring site located on St Matthews Street (IPS04), just outside the periphery of AQMA 5, has recorded a reduction of 2µg/m3 since 2023 suggesting a downward trend in concentrations.	It is very difficult to make any physical changes to the road infrastructure due to a lack of road/footpath space to accommodate changes. Further enforcement of existing loading/unloading restrictions may assist with the reduction of congestion in the area (measure 26 addresses this)

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[1], 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.

Ipswich Borough Council is undertaking a number of measures within its AQAP to improve air quality generally, as described above, which we consider will also have a positive impact on $PM_{2.5}$. The Suffolk Air Quality Group, of which Ipswich Borough Council is a member, has engaged with Suffolk County Council's (SCC) Public Health Department to pursue a unified approach to tackling $PM_{2.5}$. This is focused on promoting modal shift away from motor vehicle use towards active means of travel such as walking and cycling. Work has also been focused on providing information to the public on the harmful impacts of domestic burning, thereby encouraging behaviour change and reduced/improved burning practices.

The Public Health Outcomes Framework (PHOF) is a Public Health England data tool, intended to focus public health action on increasing healthy life expectancy and reducing differences in life expectancy between communities. The PHOF includes an indicator, based on the effect of particulate matter ($PM_{2.5}$) on mortality. According to the public health outcomes framework, the fraction of mortality in those aged over 30 years, attributable to particulate air pollution (measured as $PM_{2.5}$) in 2023 in Ipswich is 5.5%, above the average for England (5.3%) and the East of England Region (5.4%). This would suggest that $PM_{2.5}$ concentrations in Ipswich are slightly higher than other areas in the UK[2]. However, it should be noted that a large proportion of the $PM_{2.5}$ in Suffolk is derived from intercontinental sources over which the local authority has no control; this may explain,

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

[2] Public Health England, Public Health Outcomes Framework, accessed 13/05/2025. Available at: Public Health Outcomes Framework - Data | Fingertips | Department of Health and Social Care

either partly or wholly, why the fraction of mortality in those aged over 30 years, is above the average for England.

The Council are continuing to work with The Environment Agency to install a particulate analyser that forms part of the Automatic Urban and Rural Network (AURN). A location on St Georges Street has been found, and a Certificate of Lawful Use/Development has been granted for its installation (planning application ref: 24/00543/CLD). It is anticipated that the analsyer will be installed and operational within the first half of 2026. Once installed, any data subsequently collected will be reported on in future ASR submissions.

During the latter part of 2019 and in 2020, the Council, together with all the other Local Authorities across Suffolk worked with Suffolk County Council's Transport and Public Health colleagues to prepare an 'Air Quality Profile' report for Suffolk. The report maps, at a district and borough level, local air pollution levels and explores evidence-based interventions that can be undertaken by local authorities, businesses, communities and individuals to improve air quality. The report was published in June 2021 following sign-off from the Suffolk Director of Public Health.

As a result of the report, air quality was made a priority by the Suffolk Health and Wellbeing board as part of their duty to "encourage integrated working" between health, care, police and other public services in order to improve wellbeing outcomes for Suffolk. The recommendations from the Suffolk Profile have also informed both the development of a Suffolk-wide Air Quality Strategy which was published in May 2023 and the Suffolk Community Engagement Plan.

The Air Quality Strategy sets out the range of actions identified as being important to the improvement of air quality (both concentrations of nitrogen dioxide and particulate matter), along with who is the lead authority for the work, timescales for implementation, and what measurements or outcomes will be achieved. A strategy review and update took place at the end of 2024. Updates include an increased focus on indoor air quality, reflecting advances in data and evidence on the impacts of poor indoor air quality on health; action to support more nature friendly farming through Suffolk's County Farms Programme; and an evaluation project with the University of Suffolk looking at the impacts of school streets on Suffolk children's health. Updates on progress with the Air Quality Strategy can be found on the Healthy Suffolk Website.

The Suffolk Community Engagement Plan 2023/2024 set out the action Suffolk County Council (SCC), working with borough and district partners, would take to raise awareness

of the health impacts of air quality in Suffolk. The aim was to increase awareness to enable individuals to make choices that would protect both their health and the health of others from the harmful effects of pollution.

The findings from this programme of engagement can be found at www.healthysuffolk.org.uk/airquality (under Your Feedback). Key highlights:

88% (of 508 respondents) were aware that air pollution can affect health. Awareness levels in Suffolk have increased by up to 22% since a 2022 survey. However, whilst the majority of people were aware that pollution affected health they weren't always sure how (an action that has been picked up in Suffolk County Council's updated Air Quality Strategy Action Plan).

Only **12%** (of 565 respondents) said they already use, or would consider using, 'Ready to Burn' wood and smokeless fuels *if* burning at home. Awareness levels in Suffolk of household burning as a source of air pollution have been low in the past. In SCC's 2022 air pollution survey, only **8%** of respondents identified home burning as a source of pollution compared to **89%** who identified transport as a source. From these findings, coupled with national data, it is likely that there is still low public awareness of the contribution of home burning to air pollution and the subsequent health risks. This demonstrates the need for domestic burning campaigns, such as the Defra grant funded project, mentioned above, to help encourage people to think about what they are burning at home and its impacts.

The updated Suffolk Air Quality Strategy and Action Plan includes a **focus on indoor air quality**, including home burning. It will involve forging closer links with other programmes of work including Warm Homes Healthy People to ensure people are getting the support they need to heat their homes.

We will continue to consult with Suffolk County Council Public Health colleagues and be advised by them, and national guidance, on any relevant measures that will reduce exposure to poor air quality, particularly $PM_{2.5,}$ and help reduce the health impacts on our residents and visitors.

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

This section sets out the monitoring undertaken within 2025 by Ipswich Borough Council and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a five-year period between 2021 and 2025 to allow monitoring trends to be identified and discussed.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

Ipswich Borough Council undertook automatic (continuous) monitoring at two sites during 2025. Table A.1 in Appendix A shows the details of the automatic monitoring sites. The Air Quality England page presents automatic monitoring results for Ipswich Borough Council, with automatic monitoring results also available through the UK-Air website.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on how the monitors are calibrated and how the data has been adjusted are included in Appendix C.

3.1.2 Non-Automatic Monitoring Sites

Ipswich Borough Council undertook non- automatic (i.e. passive) monitoring of NO_2 at 83 sites during 2025. Table A.2 in Appendix A presents the details of the non-automatic sites.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments 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 (NO_2)

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 2025 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 annual averages greater than 60µg/m3 that would indicate an exceedance of the 1-hour mean objective.

Figure A.3 – Trends in Annual Mean NO_2 Concentrations in AQMA No.3

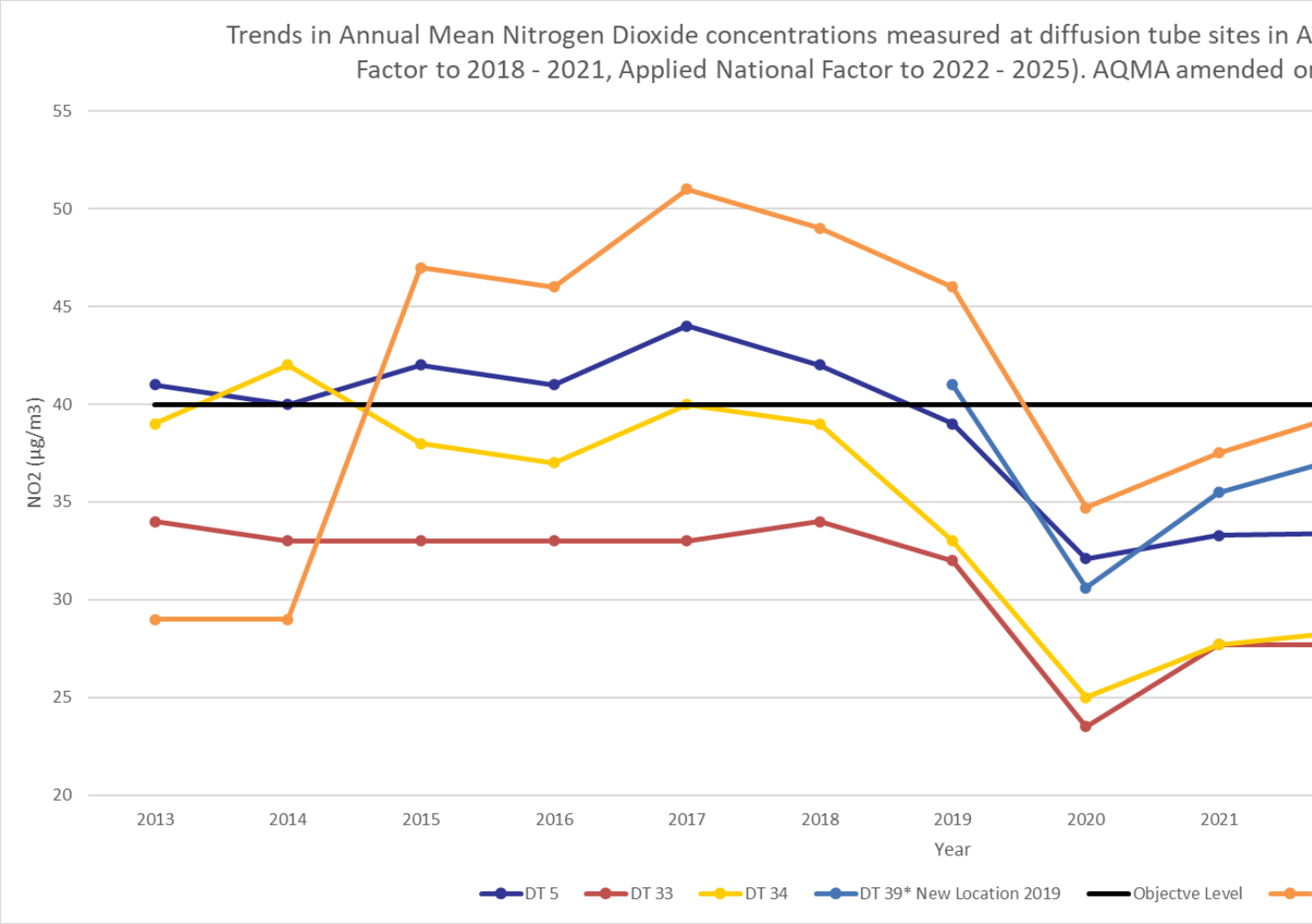


Figure A.4 – Trends in Annual Mean NO_2 Concentrations in AQMA No.4. AQMA revoked on 19/08/2021.

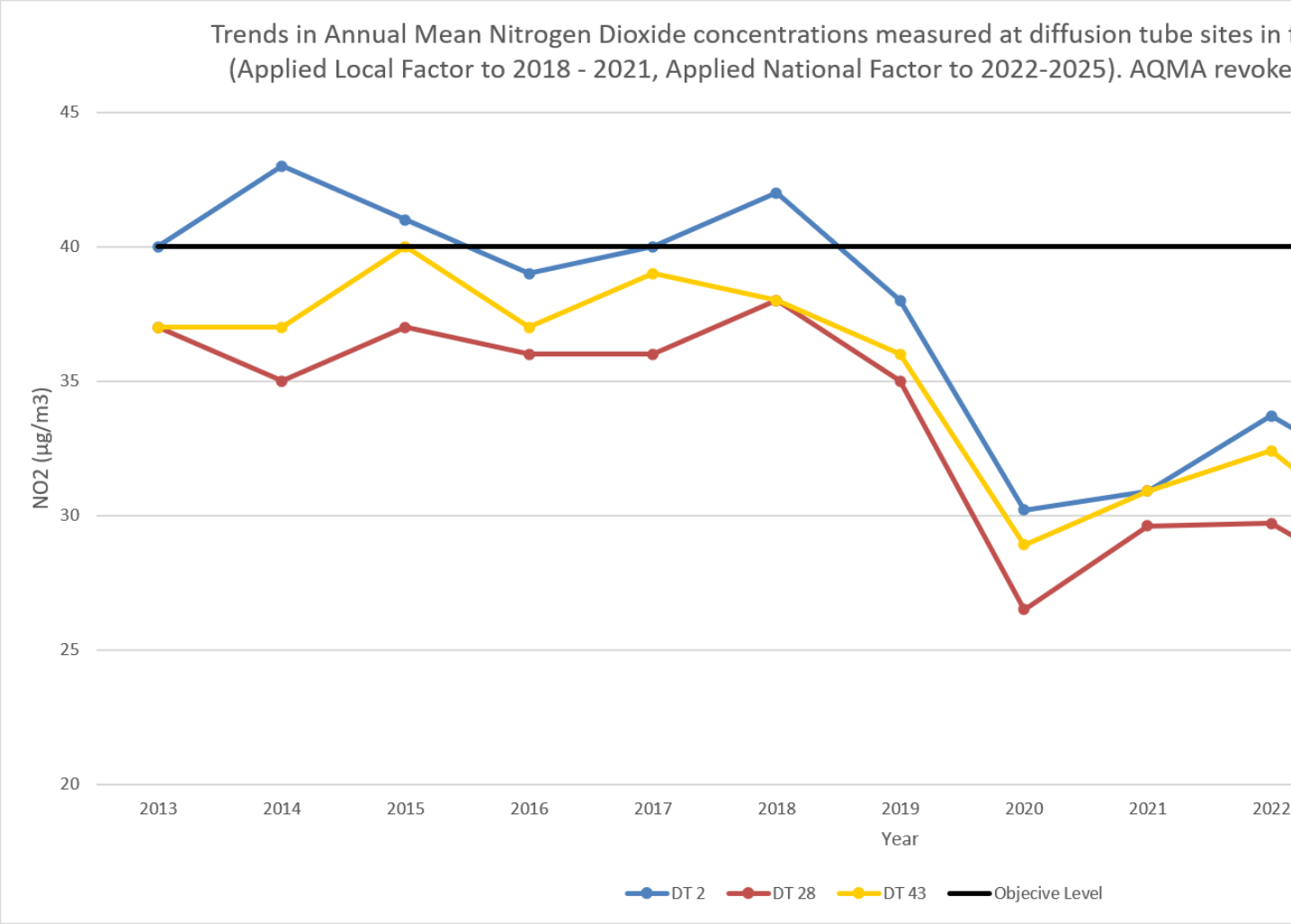


Figure A.5 – Trends in Annual Mean NO_2 Concentrations in AQMA No.5.

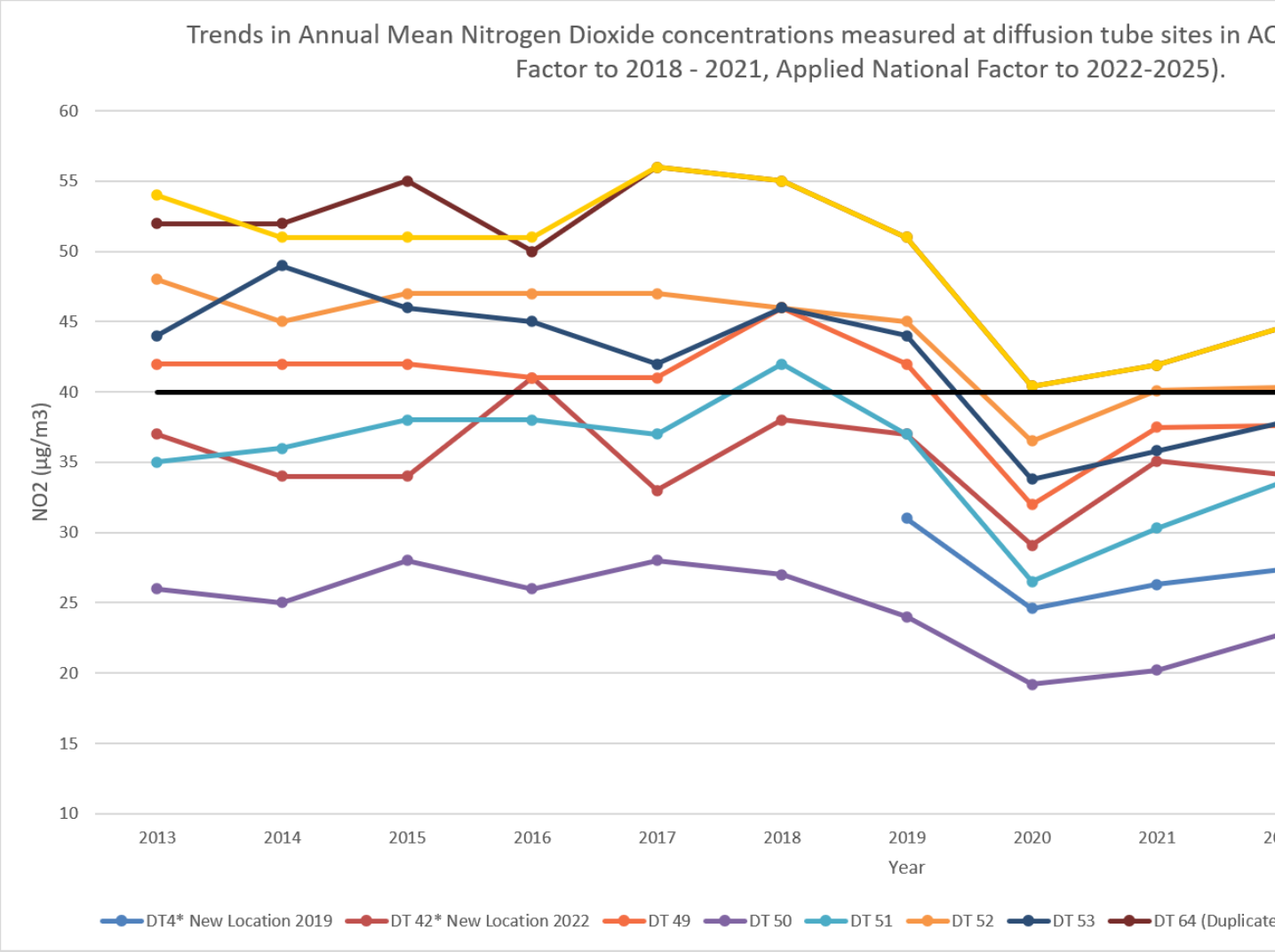


Figure A.6 – Trends in Annual Mean NO2 Concentrations outside of AQMA sites (other tubes between 1 – 19)

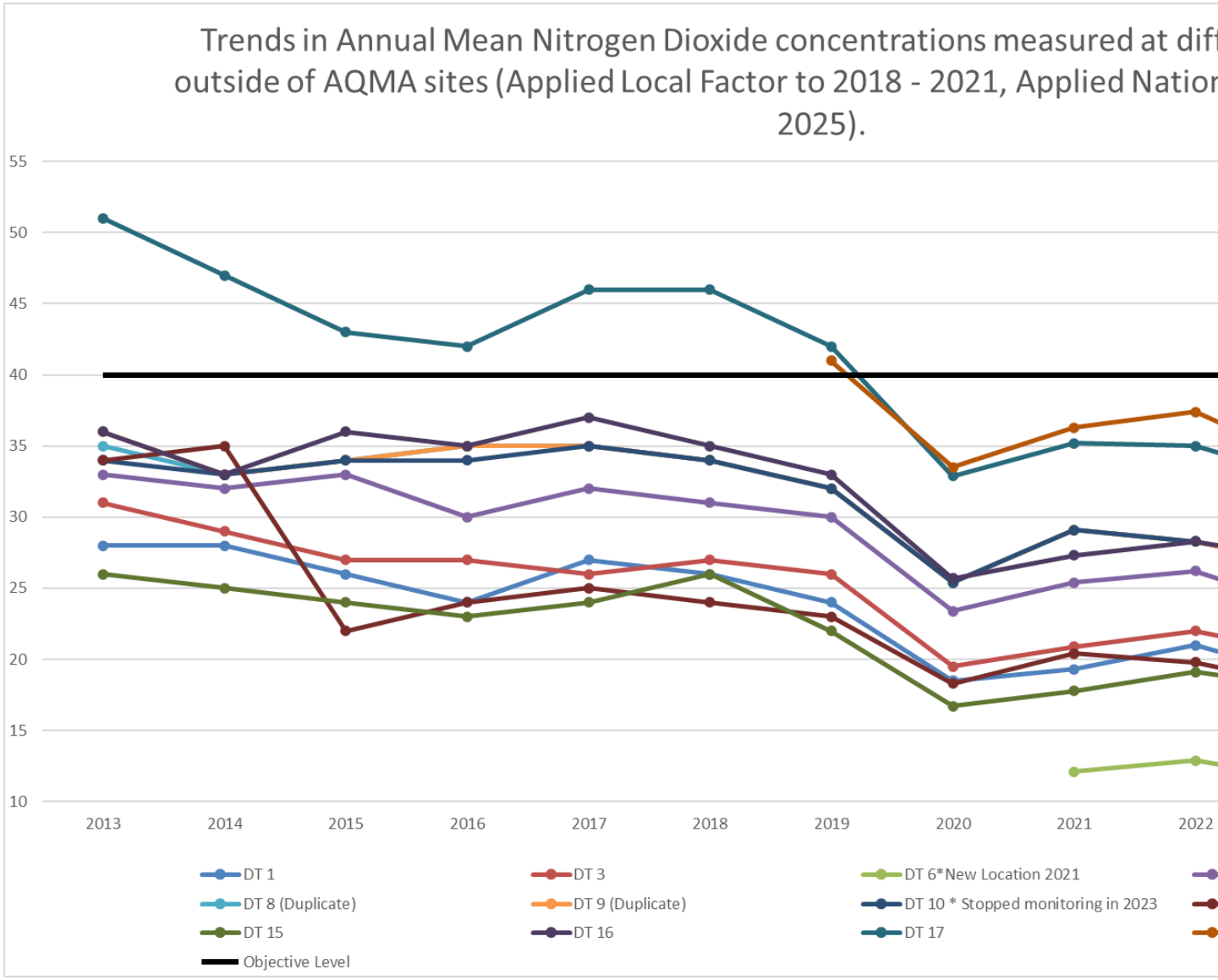


Figure A.7 – Trends in Annual Mean NO_2 Concentrations outside of AQMA sites (other tubes between 20 – 39)

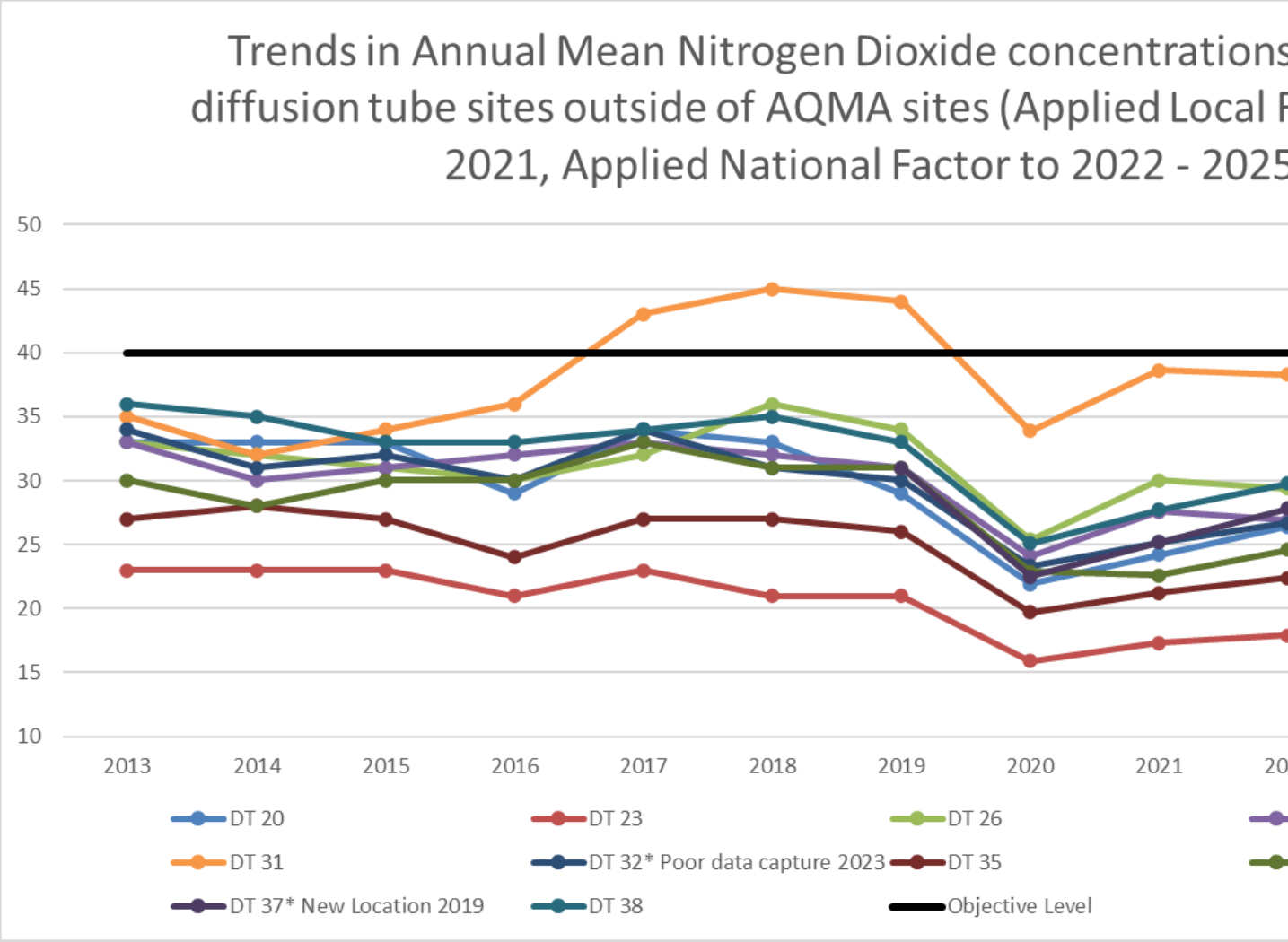


Figure A.8 – Trends in Annual Mean NO_2 Concentrations outside of AQMA sites (other tubes between 40 – 59)

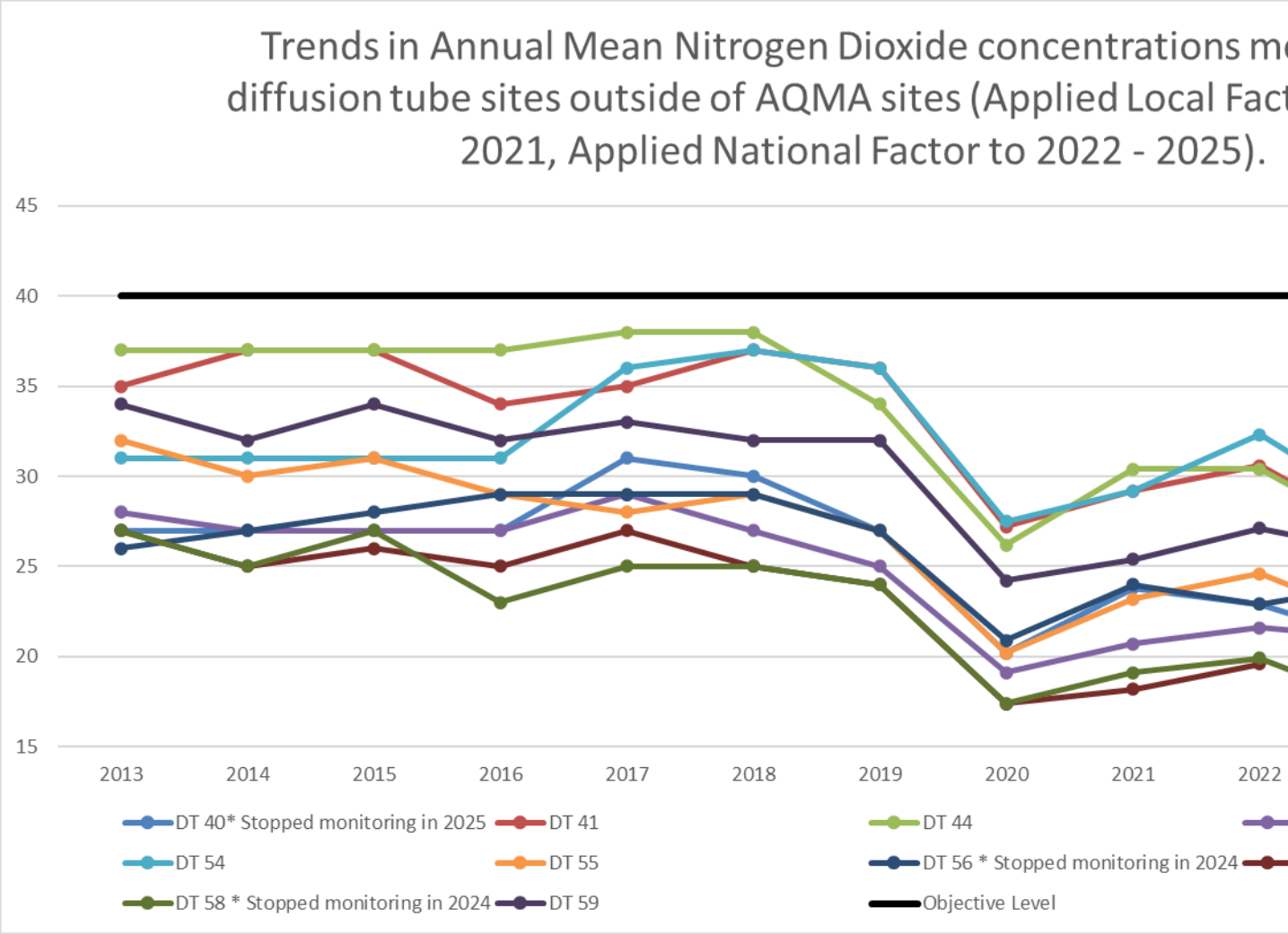


Figure A.9 – Trends in Annual Mean NO_2 Concentrations outside of AQMA sites (other tubes between 60 – 79)

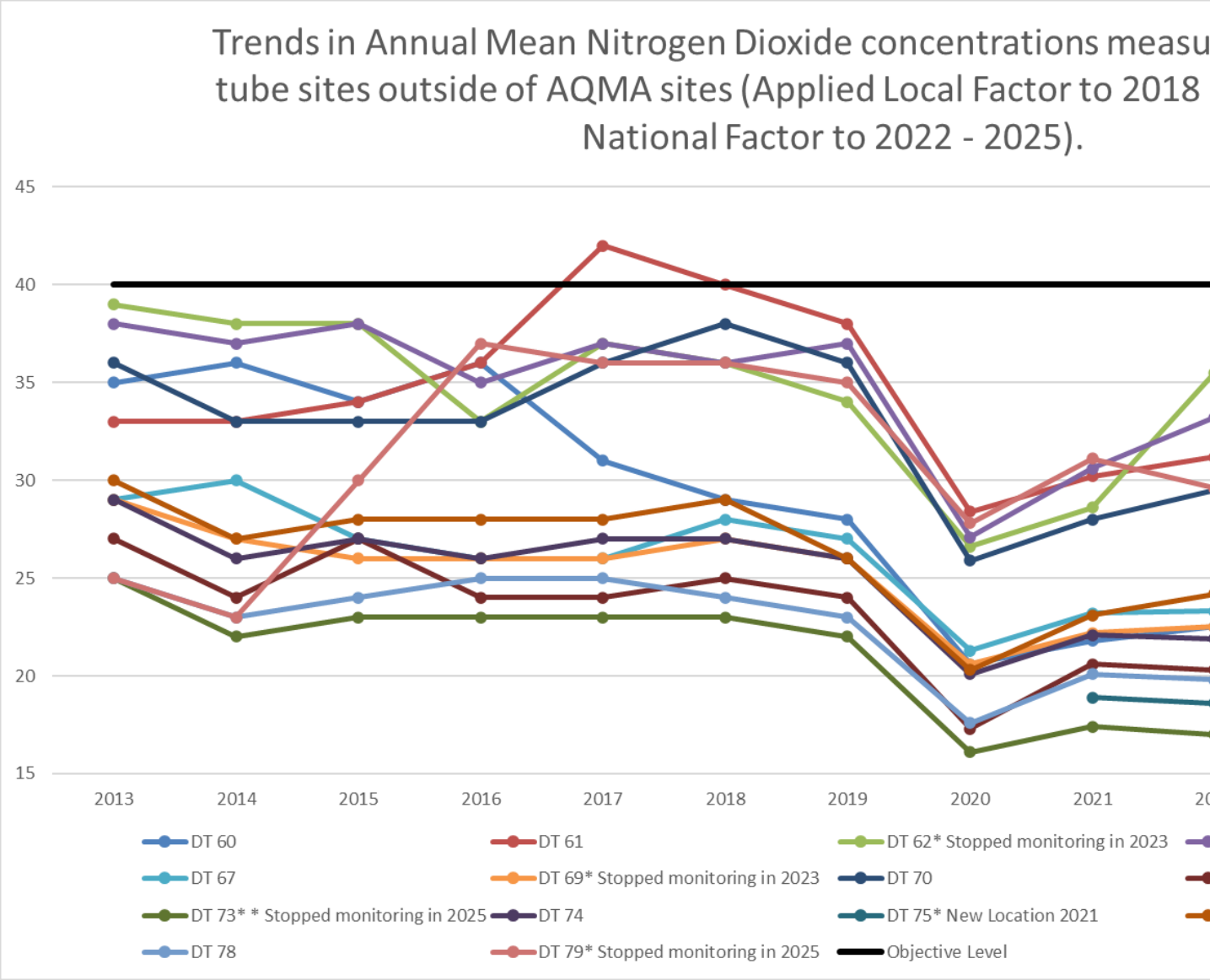


Figure A.10 – Trends in Annual Mean NO_2 Concentrations outside of AQMA sites (other tubes between 80 – 89)

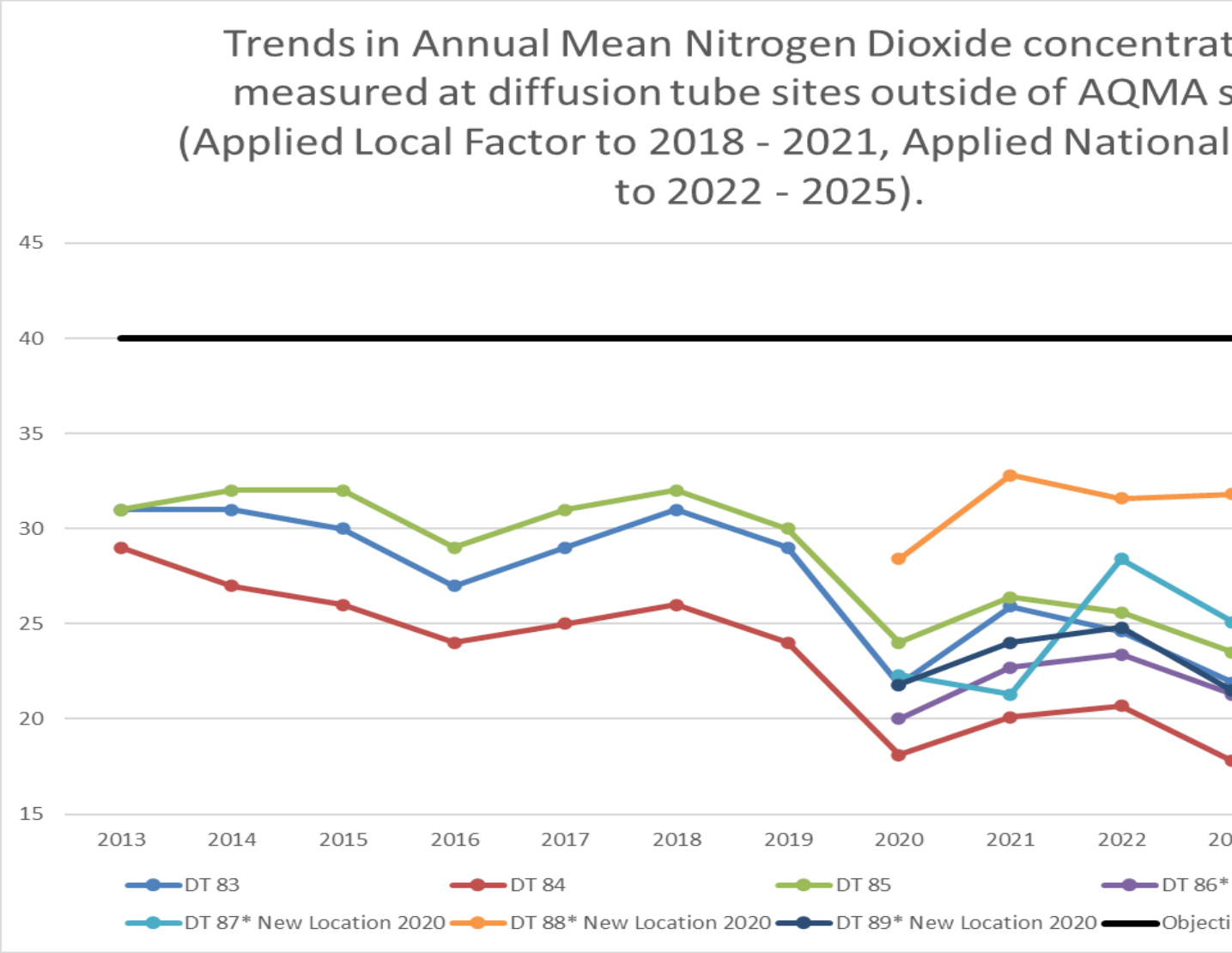


Figure A.11 – Trends in Annual Mean NO_2 Concentrations outside of AQMA sites (other tubes between 80 – 89)

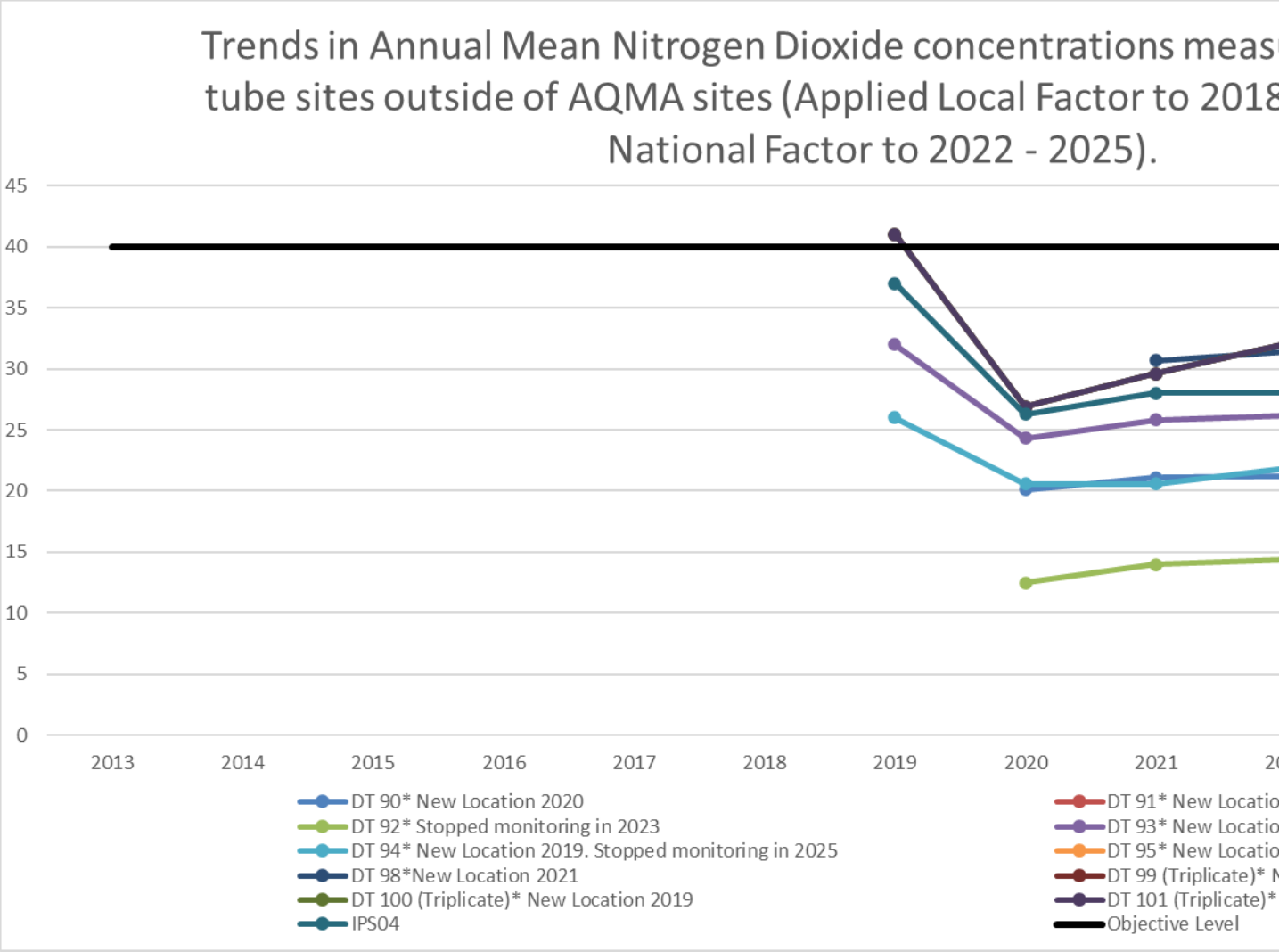


Table A.5 in Appendix A compares the ratified continuous monitored NO_2 hourly mean concentrations for the past five years with the air quality objective of 200µg/m^3, not to be exceeded more than 18 times per year.

Once bias adjusted using the national factor and distance corrected, the nitrogen dioxide diffusion tube data for 2025 shows that one site was recorded within 10% of the annual mean NO_2 objective level. This site was located within AQMAs 5. Due to the inherent uncertainty in diffusion tube monitoring data, this site is considered an exceedance of the annual mean objective level for NO_2 under the Local Air Quality Management (LAQM) Framework. This site was:

- Located within AQMA 5. Tubes 64 & 65 – duplicate.

When comparing the 2025 bias adjusted results to the 2024 results; in 2024 there were three recorded exceedances within 10% below the annual mean NO2 objective level. These sites were:

- 2 sites located within AQMA 5. Tube 52 and tubes 64 & 65 – duplicate.
- 1 site located within AQMA 2. Tubes 11, 12 & 19 – triplicate.

These sites were also recorded as being within 10% below the annual mean NO2 objective level in 2023.

Tube 64 & 65 have been within 10% below the annual mean since 2022.

Due to a continued absence of exceedances of the annual mean NO_2 objective level in AQMA 3, the Council intend to revoke AQMA 3. A copy of the Detailed Assessment supporting the revocation of AQMA 3 is attached to Appendix E.

Figures A.1 – A.11 shows bias corrected trendline plots for clusters of passive monitoring locations in and around each of the 3 AQMAs. Despite AQMA 4 being revoked in August 2021, and AQMA 1 being revoked in January 2025, they are included for transparency to help demonstrate that it was appropriate to revoke the AQMAs due to continued NO_2 concentrations under the national objective level.

When looking at the bias corrected data for 2025, annual mean NO_2 concentrations have, for the majority of sites, marginally decreased compared to the previous three years. It is possible that people's travel behaviour has permanently changed (e.g. greater working from home and increased flexible working times, avoiding rush hour commuting) since the relaxation and removal of Government restrictions associated with the COVID-19 pandemic, hence why concentrations have generally remained below 2019 pre-pandemic levels.

All diffusion tube results have been suitably corrected for bias. A locally derived bias correction factor was applied to results from 2019–2021. Due to issues with the Chevallier Street analyser, a national bias correction factor was used for the 2022–2024 data. Although the continuous monitor at St Matthew Street achieved a high data capture rate in 2025 (>75%), the national bias correction factor (0.78) was applied to the 2025 diffusion tube results instead of the locally derived factor (0.75), as it provided a more conservative assessment, giving confidence in the data presented. Further details on this are given in Appendix C. Had the Council applied the local correction factor to the data, no sites would be within 10% of the annual mean NO_2 objective level.

3.2.2 Particulate Matter (PM_{10})

Table A.6 in Appendix A: Monitoring Results compares the ratified and adjusted monitored PM_{10} annual mean concentrations since May 2023 with the air quality objective of 40µg/m^3.

Table A.7 in Appendix A compares the ratified continuous monitored PM_{10} 24 hour mean concentrations since May 2023 with the air quality objective of 50µg/m^3, not to be exceeded more than 35 times per year.

This is the third year the Council has monitored for PM_{10} following the purchase and installation of a FIDAS analyser in May 2023; we have no PM_{10} data prior to this date. Following ratification and annualisation, an annual mean concentration of 15.5µg/m^3 was recorded at the monitor on St Helens Street (located within the boundary of AQMA 2 – declared for an exceedance of the annual mean NO_2 objective level). This has marginally increased compared to the previous two years (13.6µg/m^3 and 13.9µg/m^3) but is still below the annual mean objective level. Five exceedances of the 24-hour mean were observed; this is below the permitted standard of no more than 35 exceedances a year.

3.2.3 Particulate Matter ($PM_{2.5}$)

Table A.8 in Appendix A presents the ratified and adjusted monitored $PM_{2.5}$ annual mean concentrations for the past three years.

This is the third year the Council has begun to monitor for $PM_{2.5}$ following the purchase and installation of a FIDAS analyser in May 2023; we have no $PM_{2.5}$ data prior to this date. Following ratification and annualisation, an annual mean concentration of 9µg/m^3 was recorded at the monitor on St Helens Street. This has marginally increased compared to the previous two years (8 µg/m^3 and 8.1 µg/m^3) but is still below the annual mean concentration target of 10µg/m^3 to be met by 2040.

In addition to the above, the Council are continuing to work with The Environment Agency to install a particulate analyser that forms part of the Automatic Urban and Rural Network (AURN). A location on St Georges Street has been found, and a Certificate of Lawful Use/Development has been granted for its installation (planning application ref: 24/00543/CLD). It is anticipated that the analsyer will be installed and operational within the first half of 2026. Once installed, any data subsequently collected will be reported on in future ASR submissions.

Comparison with National Background Sites

To provide wider spatial and national context, hourly $PM_{2.5}$ concentrations measured at Ipswich St Helens Street during 2025 have been compared against a selection of Automatic Urban and Rural Network (AURN) monitoring sites located to the north, south, east and west of Ipswich. Comparator sites include Sibton (rural background), Norwich Lakenfields, Wicken Fen, Portsmouth Anglesea Road, Newcastle Cradlewell and Oxford St Ebbes. These sites have been selected to represent a range of urban and rural background environments across England.

Time-series comparison of hourly $PM_{2.5}$ concentrations demonstrates that concentrations at Ipswich St Helens Street broadly follow the same temporal patterns observed at comparator sites nationwide. In particular, all sites considered exhibit elevated $PM_{2.5}$ concentrations during the winter and early spring period, notably between January and April 2025, followed by lower and more stable concentrations throughout the summer months (Figures 3.1 and 3.2).

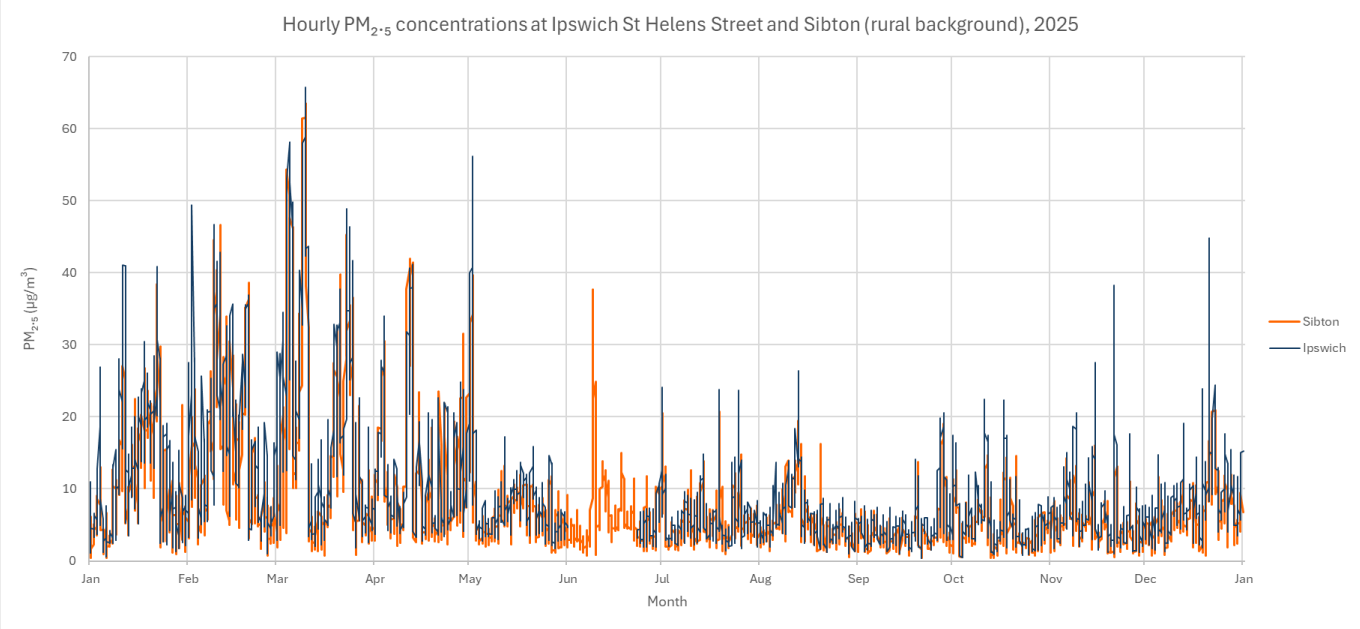


Figure 3.1 - Comparison of hourly $PM_{2.5}$ concentrations recorded at the urban Ipswich St Helens Street site and the rural background Sibton monitoring site during 2025.

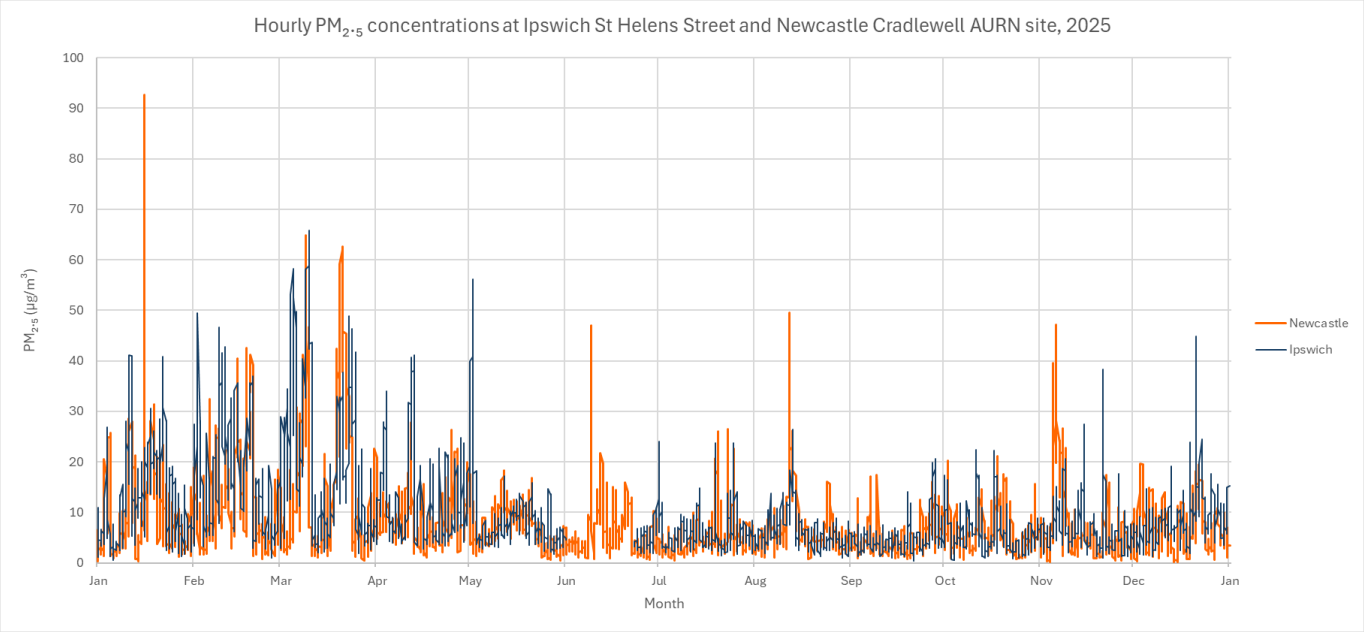


Figure 3.2 - Comparison of hourly $PM_{2.5}$ concentrations recorded at Ipswich St Helens Street and the Newcastle Cradlewell AURN monitoring site during 2025.

While absolute concentrations at Ipswich St Helens Street are generally higher than those recorded at rural background locations such as Sibton and Wicken Fen, this is consistent with the urban nature of the site. Comparisons with urban background and roadside AURN sites indicate that Ipswich $PM_{2.5}$ concentrations are generally comparable to those observed in other towns and cities across England during periods of elevated concentrations.

The broadly consistent timing of elevated $PM_{2.5}$ concentrations across sites located in different regions of England suggests the influence of regional and national-scale pollution episodes affecting multiple areas simultaneously. Such episodes may reflect a combination of seasonal meteorological conditions conducive to pollutant accumulation, increased combustion emissions during colder periods, and the transport of particulate matter over regional or national scales. While site-specific sources contribute to local variation in concentration magnitude, the temporal coherence observed between Ipswich and distant AURN sites indicates that $PM_{2.5}$ concentrations are not solely attributable to localised emissions.

Additional time-series comparisons with Norwich Lakenfields, Wicken Fen, Portsmouth Anglesea Road and Oxford St Ebbe's are presented in Appendix A (Figures A.15–A.18).

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Which AQMA? (1)	Monitoring Technique	Distance to Relevant Exposure (m) (1,2)	Distance to kerb of nearest road (m) (1)	Inlet Height (m)
IPS04	St Matthews Street	Roadside	615870	244858	NO2	No		Chemiluminescent	12.8	2.9	1.4
IPS05	St Helens Street	Roadside	617007	244528	PM10, PM2.5	No		FIDAS 200 - Optical light scattering	7.5	5.0	2.0

Notes:

(1) N/A if not applicable

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

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	Civic Drive	Roadside	615992	244412	NO2	No	18.8	6.0	No	2.6
2	Chevallier Street	Roadside	615144	245245	NO2	No	1.6	2.0	No	2.4
3	Coprolite Street / Duke Street	Kerbside	617070	244039	NO2	No	N/A	0.8	No	2.6
4	Norwich Road	Roadside	615620	245000	NO2	No	0.0	5.7	No	2.4
5	Fore Street	Roadside	616887	244128	NO2	Yes - AQMA 3	0.9	3.3	No	2.4
6	Kings Avenue	Urban Background	617288	244429	NO2	No	0.0	4.3	No	2.1
7	Bramford Road	Roadside	615007	245239	NO2	No	0.0	5.6	No	2.3
8, 9	Bramford Road	Roadside	615125	245209	NO2	No	4.3	2.2	No	2.5
14	Chevallier Street	Roadside	615285	245393	NO2	No	0.4	2.5	No	2.2
15	Tavern Street	Urban Background	616282	244643	NO2	No	N/A	N/A	No	2.6
16	Valley Road / Westwood Court	Roadside	615362	245437	NO2	No	2.6	3.1	No	2.5
17	Woodbridge Road	Roadside	616993	244659	NO2	No	2.1	1.8	No	2.5

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)
18	Yarmouth Road	Roadside	615090	245178	NO2	No	0.0	3.2	No	2.2
11, 12, 19	St Margaret's Street / Piper's Court	Roadside	616593	244753	NO2	Yes - AQMA 2	0.0	2.5	No	2.3
20	Fonnereau Road	Roadside	616458	244829	NO2	No	1.8	2.2	No	2.6
21	St Margaret's Plain	Roadside	616494	244807	NO2	Yes - AQMA 2	N/A	2.0	No	2.4
22	St Margaret's Plain / Northgate Street	Roadside	616489	244785	NO2	Yes - AQMA 2	N/A	1.6	No	2.6
23	St Margaret's Green	Roadside	616645	244784	NO2	No	0.0	3.3	No	2.5
24	St Margaret's Street	Roadside	616663	244692	NO2	Yes - AQMA 2	N/A	3.3	No	2.4
25	St Helen's Street	Roadside	616753	244582	NO2	Yes - AQMA 2	1.1	3.0	No	2.5
26	St Helen's Street / Grimwade Street	Roadside	616971	244511	NO2	No	0.0	3.6	No	2.3
27	Argyle Street	Roadside	616965	244546	NO2	Yes - AQMA 2	0.3	1.2	No	2.3
28	Chevallier Street	Roadside	615194	245292	NO2	No	2.6	1.9	No	2.5
29	Fore Hamlet	Roadside	617118	244074	NO2	No	0.0	2.2	No	2.7

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)
30	Fore Street	Roadside	616939	244114	NO2	Yes - AQMA 3	1.4	2.7	No	2.5
31	Star Lane	Roadside	616332	244149	NO2	No	N/A	2.4	No	2.3
32	Spring Road	Roadside	617374	244577	NO2	No	4.0	2.4	No	2.4
33	Key Street	Roadside	616666	244114	NO2	Yes - AQMA 3	0.0	2.0	No	2.5
34	College Street	Roadside	616467	244072	NO2	Yes - AQMA 3	N/A	1.8	No	2.5
35	Cobden Place	Roadside	616746	244696	NO2	No	0.0	1.1	No	2.4
36	Valley Road	Roadside	616820	246158	NO2	No	15.0	2.2	No	2.5
37	Star Lane	Roadside	616845	244252	NO2	No	0.0	1.1	No	2.5
38	Civic Drive	Kerbside	615904	244805	NO2	No	6.3	0.9	No	2.5
39	Star Lane	Kerbside	616712	244228	NO2	Yes - AQMA 3	1.3	0.8	No	2.4
41	Bramford Road / Norwich Road	Roadside	615564	245010	NO2	No	0.5	1.3	No	2.5
42	Norwich Road	Roadside	615744	244901	NO2	Yes - AQMA 5	0.0	2.5	No	2.7
43	Bramford Road / Yarmouth Road	Roadside	615109	245200	NO2	No	0.6	3.6	No	2.4

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)
44	Bramford Road	Roadside	615052	245237	NO2	No	4.8	1.6	No	2.4
45	Chevallier Street	Roadside	615261	245350	NO2	No	2.5	4.2	No	1.2
48	Valley Road	Roadside	615425	245486	NO2	No	7.4	2.6	No	2.7
49	St Matthew's Street	Roadside	615792	244876	NO2	Yes - AQMA 5	0.0	1.9	No	2.6
50	Barrack Lane	Roadside	615773	244890	NO2	Yes - AQMA 5	1.5	1.4	No	2.4
51	St Matthew's Street	Kerbside	615769	244866	NO2	Yes - AQMA 5	4.5	0.9	No	2.6
52	St Matthew's Street	Roadside	615826	244871	NO2	Yes - AQMA 5	0.0	2.2	No	2.5
53	St Matthew's Street	Roadside	615820	244858	NO2	Yes - AQMA 5	0.0	2.2	No	2.3
54	St Matthew's Street Roundabout	Roadside	615893	244855	NO2	No	10.4	1.3	No	2.5
55	Berners Street	Roadside	615917	244898	NO2	No	0.0	2.3	No	2.5
59	St Matthew's Street Roundabout	Roadside	615926	244837	NO2	No	N/A	2.9	No	2.5
60	Colchester Road	Roadside	617438	246168	NO2	No	14.5	3.1	No	2.4

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)
61	Valley Road	Roadside	616099	246105	NO2	No	19.5	2.4	No	2.5
63	St Matthew's Street	Roadside	615950	244790	NO2	No	0.0	3.3	No	2.4
64, 65	Norwich Road	Roadside	615688	244939	NO2	Yes - AQMA 5	0.4	1.3	No	2.4
66	Woodbridge Road	Roadside	616807	244669	NO2	Yes - AQMA 2	0.0	3.4	No	2.4
67	Blanche Street	Roadside	616890	244676	NO2	No	6.3	1.4	No	2.6
68	Woodbridge Road	Roadside	616905	244657	NO2	Yes - AQMA 2	0.0	3.4	No	2.5
70	Argyle Street	Roadside	616965	244583	NO2	No	N/A	1.6	No	2.3
71	St Helen's Street	Roadside	617032	244537	NO2	No	0.0	14.5	No	2.5
72	St Helen's Street	Roadside	617123	244535	NO2	Yes - AQMA 2	0.0	1.9	No	2.6
74	Grimwade Street	Roadside	616953	244443	NO2	No	N/A	2.1	No	2.5
75	Grimwade Street	Roadside	616927	244395	NO2	No	0.0	7.0	No	2.3
76	St Helen's Street	Roadside	616951	244521	NO2	Yes - AQMA 2	0.0	3.0	No	2.5
77	St Helen's Street	Roadside	616902	244542	NO2	No	0.0	4.7	No	2.5

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)
78	Orchard Street	Roadside	616870	244586	NO2	No	1.5	1.4	No	2.6
80, 81, 82	St Helen's Street	Kerbside	616821	244546	NO2	Yes - AQMA 2	N/A	1.0	No	2.4
83	Bond Street	Roadside	616792	244498	NO2	No	1.6	1.6	No	2.2
84	Carr Street / Major's Corner	Roadside	616702	244601	NO2	No	N/A	4.4	No	2.5
85	Old Foundry Road	Roadside	616681	244623	NO2	No	0.2	1.3	No	2.5
86	Upper Orwell Street	Kerbside	616727	244566	NO2	No	0.0	0.9	No	2.2
87	Northgate Street	Roadside	616481	244725	NO2	No	0.0	1.8	No	2.3
88	Stoke Street	Roadside	616307	243875	NO2	No	0.0	1.8	No	2.5
89	Hadleigh Road	Roadside	614816	244585	NO2	No	4.2	2.8	No	2.5
90	Hadleigh Road	Roadside	614893	244558	NO2	No	0.0	12.1	No	2.3
91	London Road	Roadside	615195	244621	NO2	No	0.0	9.7	No	2.3
93	Grove Lane	Roadside	617360	244536	NO2	No	0.0	4.8	No	2.4
95	Vernon Street	Roadside	616424	243804	NO2	No	0.0	1.6	No	2.7

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)
96	Crown Street	Kerbside	616279	244807	NO2	Yes - AQMA 2	2.2	0.9	No	2.4
97	Crown Street/ Northgate Street	Kerbside	616474	244795	NO2	Yes - AQMA 2	5.8	2.9	No	2.2
98	Fore Street	Kerbside	617037	244085	NO2	No	0.0	2.3	No	2.4
99, 100, 101	St Matthew's Street	Roadside	615870	244858	NO2	No	11.9	4.2	Yes	1.4

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 NO_2 Monitoring Results: Automatic Monitoring (µg/m^3)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2021	2022	2023	2024	2025
IPS04	615870	244858	Roadside	99.1	99.1	28	28	27	25.8	25.5

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

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

☒ **Where exceedances of the NO_2 annual mean objective occur at locations not representative of relevant exposure, the fall-off with distance concentration has been calculated and reported concentration provided in brackets for 2025**

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**.

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%).

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

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 2025 (%) (2)	2021	2022	2023	2024	2025
1	615992	244412	Roadside	100.0	100.0	19.3	21.0	18.6	17.5	17.3
2	615144	245245	Roadside	100.0	100.0	30.9	33.7	31.0	29.3	28.1
3	617070	244039	Kerbside	100.0	100.0	20.9	22.0	20.3	17.0	17.3
4	615620	245000	Roadside	100.0	100.0	26.3	27.4	24.4	24.1	23.0
5	616887	244128	Roadside	100.0	100.0	33.3	33.4	31.2	28.6	28.1
6	617288	244429	Urban Background	100.0	100.0	12.1	12.9	11.4	9.9	10.5
7	615007	245239	Roadside	100.0	100.0	25.4	26.2	23.4	22.9	21.7
8, 9	615125	245209	Roadside	100.0	100.0	29.1	28.4	26.6	24.4	23.9
14	615285	245393	Roadside	100.0	100.0	34.2	33.1	32.2	31.2	29.7
15	616282	244643	Urban Background	100.0	100.0	17.8	19.1	17.9	16.3	15.1
16	615362	245437	Roadside	90.4	90.4	27.3	28.3	26.9	26.1	22.8
17	616993	244659	Roadside	92.3	92.3	35.2	35.0	32.5	29.6	28.5

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 2025 (%) (2)	2021	2022	2023	2024	2025
18	615090	245178	Roadside	100.0	100.0	36.3	37.4	33.6	32.8	31.7
11, 12, 19	616593	244753	Roadside	100.0	100.0	**41.9**	**42.2**	37.0	36.4	33.5
20	616458	244829	Roadside	75.0	75.0	24.2	26.4	22.7	24.4	22.1
21	616494	244807	Roadside	100.0	100.0	27.2	30.7	29.4	28.3	26.1
22	616489	244785	Roadside	100.0	100.0	25.4	30.0	27.2	26.1	26.4
23	616645	244784	Roadside	100.0	100.0	17.3	17.9	15.8	15.4	15.1
24	616663	244692	Roadside	92.3	92.3	34.2	33.4	32.0	27.8	28.7
25	616753	244582	Roadside	100.0	100.0	34.8	33.2	29.9	29.1	28.1
26	616971	244511	Roadside	100.0	100.0	30.0	29.4	27.3	26.3	25.3
27	616965	244546	Roadside	100.0	100.0	31.6	32.6	30.9	27.5	26.2
28	615194	245292	Roadside	100.0	100.0	29.6	29.7	27.0	25.6	26.1
29	617118	244074	Roadside	100.0	100.0	27.6	26.9	25.1	23.7	22.6
30	616939	244114	Roadside	100.0	100.0	37.5	39.6	35.2	34.9	32.6

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 2025 (%) (2)	2021	2022	2023	2024	2025
31	616332	244149	Roadside	100.0	100.0	38.6	38.3	34.4	31.1	27.7
32	617374	244577	Roadside	100.0	100.0	25.2	26.7	-	21.7	19.5
33	616666	244114	Roadside	100.0	100.0	27.7	27.7	24.6	22.8	23.8
34	616467	244072	Roadside	100.0	100.0	27.7	28.4	24.9	23.6	21.6
35	616746	244696	Roadside	100.0	100.0	21.2	22.4	20.9	19.9	18.2
36	616820	246158	Roadside	100.0	100.0	22.6	24.6	22.8	20.1	18.4
37	616845	244252	Roadside	100.0	100.0	25.2	27.8	24.4	22.8	24.3
38	615904	244805	Kerbside	100.0	100.0	27.7	29.8	26.7	26.2	25.3
39	616712	244228	Kerbside	100.0	100.0	36.5	37.4	34.2	32.9	29.2
41	615564	245010	Roadside	100.0	100.0	29.2	30.6	26.7	27.1	27.1
42	615744	244901	Roadside	100.0	100.0	**N/A**	34.1	28.5	26.9	26.5
43	615109	245200	Roadside	100.0	100.0	30.9	32.4	28.7	26.9	26.1
44	615052	245237	Roadside	100.0	100.0	30.4	30.4	26.5	26.7	26.3

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 2025 (%) (2)	2021	2022	2023	2024	2025
45	615261	245350	Roadside	100.0	100.0	22.3	22.0	20.5	18.6	18.3
48	615425	245486	Roadside	100.0	100.0	20.7	21.6	21.0	18.5	16.6
49	615792	244876	Roadside	100.0	100.0	37.5	37.6	33.3	31.8	34.0
50	615773	244890	Roadside	100.0	100.0	20.2	22.8	21.3	19.4	18.6
51	615769	244866	Kerbside	100.0	100.0	30.3	33.6	27.6	25.6	29.4
52	615826	244871	Roadside	100.0	100.0	**40.1**	**40.3**	37.0	36.1	33.7
53	615820	244858	Roadside	92.3	92.3	35.8	37.8	32.5	32.4	30.6
54	615893	244855	Roadside	100.0	100.0	29.2	32.3	28.0	26.8	26.1
55	615917	244898	Roadside	90.4	90.4	23.2	24.6	21.8	21.2	21.3
59	615926	244837	Roadside	100.0	100.0	25.4	27.1	25.7	24.8	23.8
60	617438	246168	Roadside	100.0	100.0	21.8	22.5	20.0	18.8	18.2
61	616099	246105	Roadside	100.0	100.0	30.2	31.2	29.4	26.4	25.6
63	615950	244790	Roadside	100.0	100.0	30.6	33.2	29.5	31.0	29.2

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 2025 (%) (2)	2021	2022	2023	2024	2025
64, 65	615688	244939	Roadside	100.0	100.0	**41.9**	**44.6**	**40.4**	**40.8**	38.4
66	616807	244669	Roadside	100.0	100.0	33.3	33.4	29.8	29.7	26.2
67	616890	244676	Roadside	100.0	100.0	23.2	23.3	21.2	20.3	19.8
68	616905	244657	Roadside	100.0	100.0	36.2	36.2	33.3	31.6	31.1
70	616965	244583	Roadside	92.3	92.3	28.0	29.5	26.9	25.9	20.6
71	617032	244537	Roadside	100.0	100.0	20.6	20.3	18.9	18.1	16.5
72	617123	244535	Roadside	100.0	100.0	30.3	30.4	28.5	25.7	23.0
74	616953	244443	Roadside	90.4	90.4	22.1	21.9	22.0	19.3	20.5
75	616927	244395	Roadside	100.0	100.0	18.9	18.6	17.3	17.0	16.8
76	616951	244521	Roadside	84.6	84.6	31.0	31.6	28.4	28.4	25.3
77	616902	244542	Roadside	100.0	100.0	23.1	24.2	21.5	20.4	19.5
78	616870	244586	Roadside	100.0	100.0	20.1	19.8	18.0	16.8	16.8
80, 81, 82	616821	244546	Kerbside	100.0	100.0	30.1	32.0	28.0	26.9	26.0

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 2025 (%) (2)	2021	2022	2023	2024	2025
83	616792	244498	Roadside	90.4	90.4	25.9	24.6	21.9	20.5	22.4
84	616702	244601	Roadside	75.0	75.0	20.1	20.7	17.8	16.1	16.6
85	616681	244623	Roadside	100.0	100.0	26.4	25.9	23.5	21.1	19.6
86	616727	244566	Kerbside	100.0	100.0	22.7	23.4	21.3	19.1	19.6
87	616481	244725	Roadside	100.0	100.0	21.3	28.4	25.1	24.1	24.5
88	616307	243875	Roadside	100.0	100.0	32.8	31.6	31.8	30.1	28.4
89	614816	244585	Roadside	100.0	100.0	24.0	24.8	21.5	22.2	20.4
90	614893	244558	Roadside	90.4	90.4	21.1	21.2	20.2	18.4	17.6
91	615195	244621	Roadside	100.0	100.0	**N/A**	21.2	16.3	15.8	15.3
93	617360	244536	Roadside	100.0	100.0	25.8	26.2	24.9	23.9	21.1
95	616424	243804	Roadside	100.0	100.0	19.8	18.5	29.7	29.1	25.8
96	616279	244807	Kerbside	100.0	100.0	32.9	36.7	31.7	31.1	30.7
97	616474	244795	Kerbside	100.0	100.0	32.2	36.3	31.5	30.8	30.1

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 2025 (%) (2)	2021	2022	2023	2024	2025
98	617037	244085	Kerbside	100.0	100.0	30.7	31.4	27.1	27.7	25.2
99, 100, 101	615870	244858	Roadside	100.0	100.0	29.6	32.1	27.7	27.7	27.3

☒ **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/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 in former AQMA No.1. AQMA revoked on 22/01/2025.

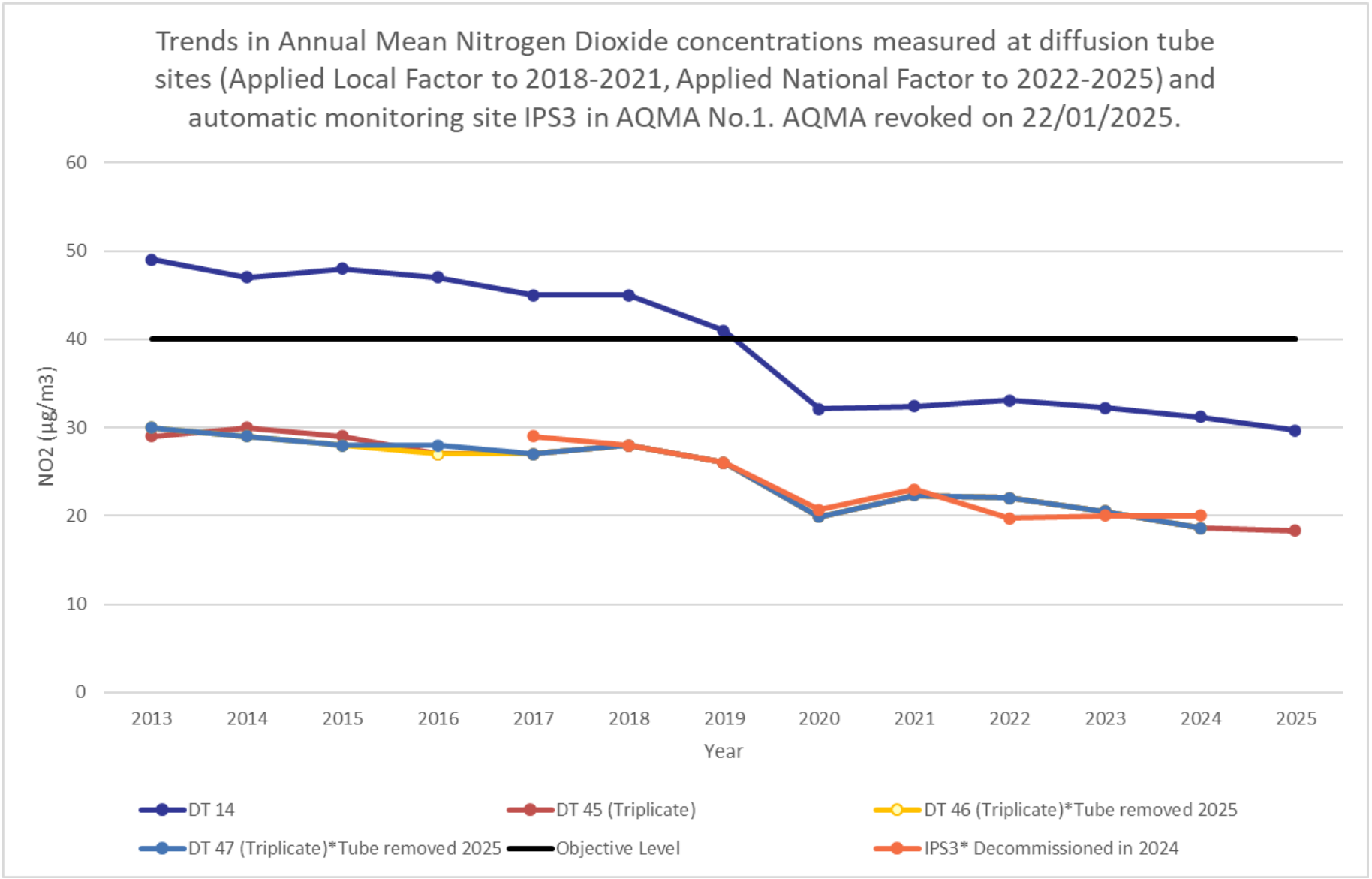


Figure A.2 – Trends in Annual Mean NO_2 Concentrations in AQMA No.2

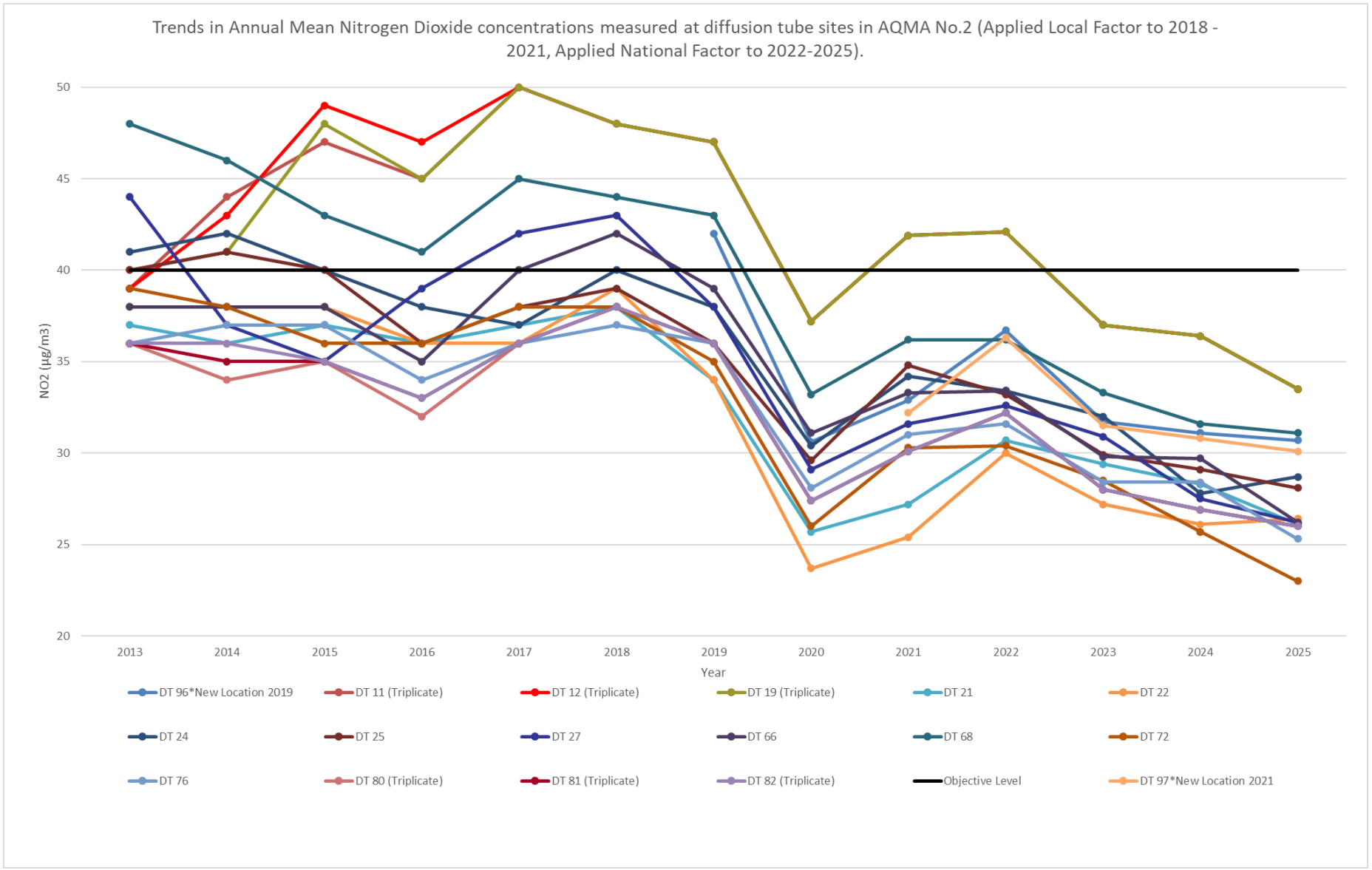


Figure A.3 – Trends in Annual Mean NO_2 Concentrations in AQMA No.3

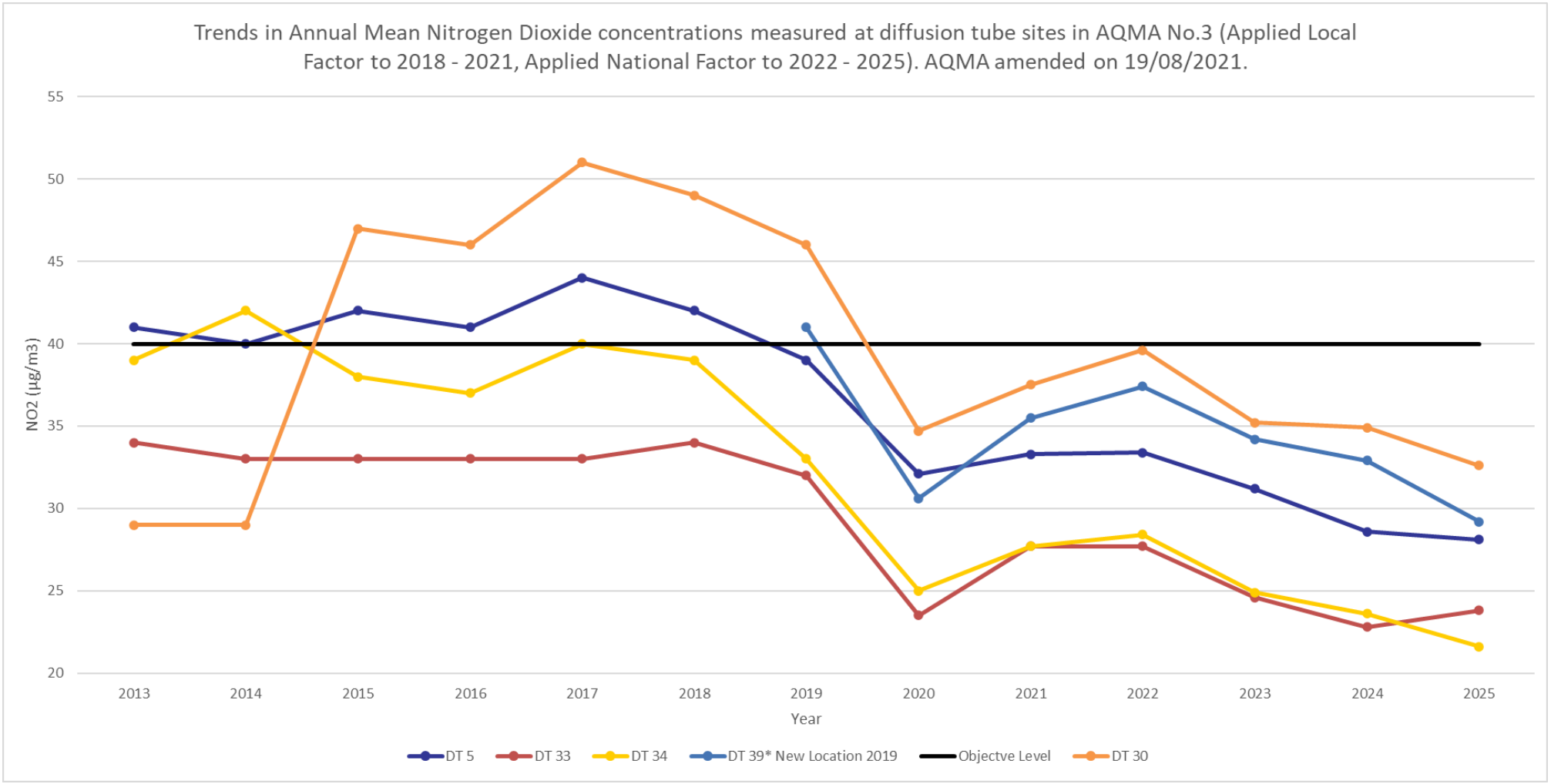


Figure A.4 – Trends in Annual Mean NO_2 Concentrations in AQMA No.4. AQMA revoked on 19/08/2021.

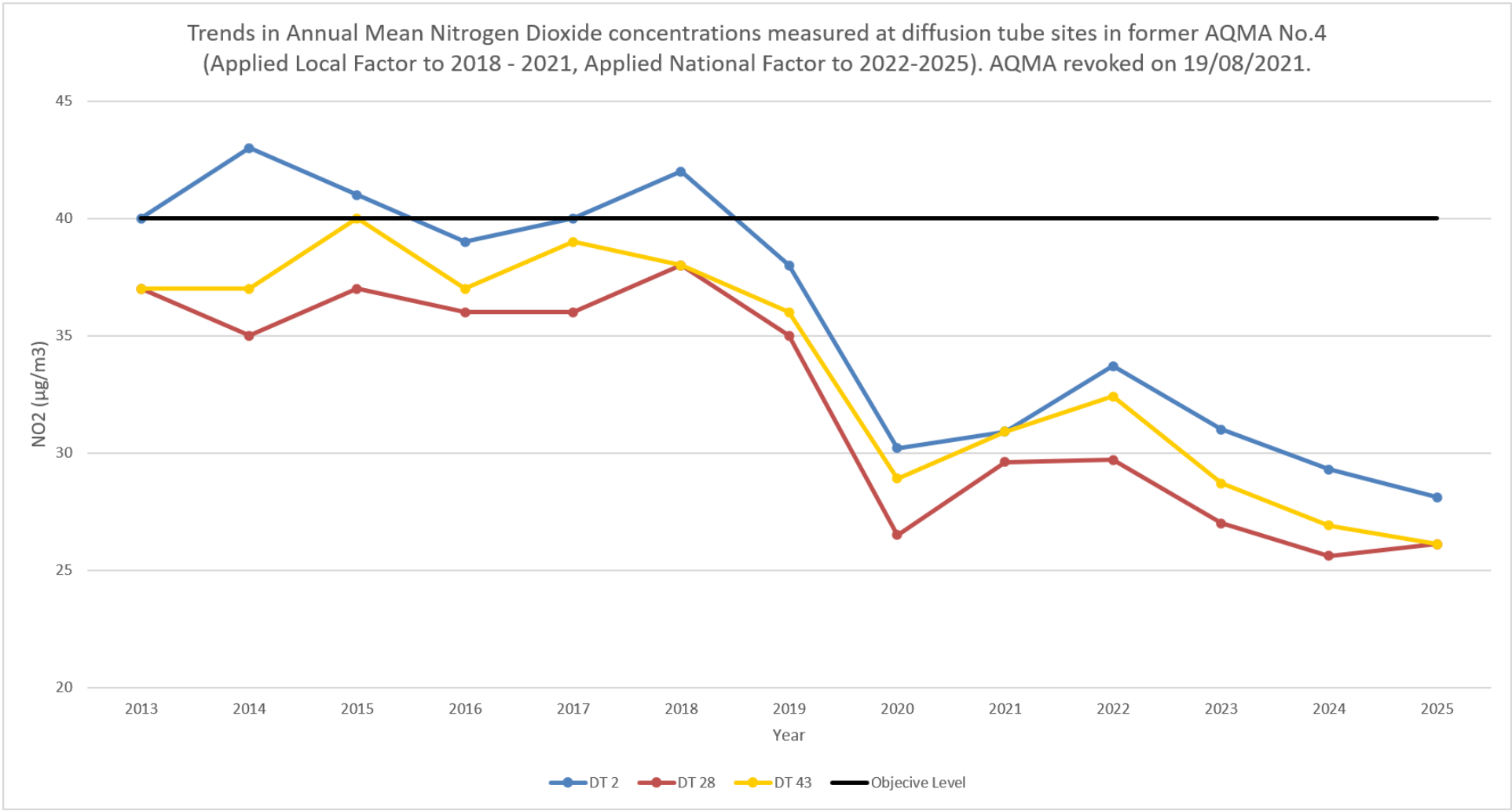


Figure A.5 – Trends in Annual Mean NO_2 Concentrations in AQMA No.5.

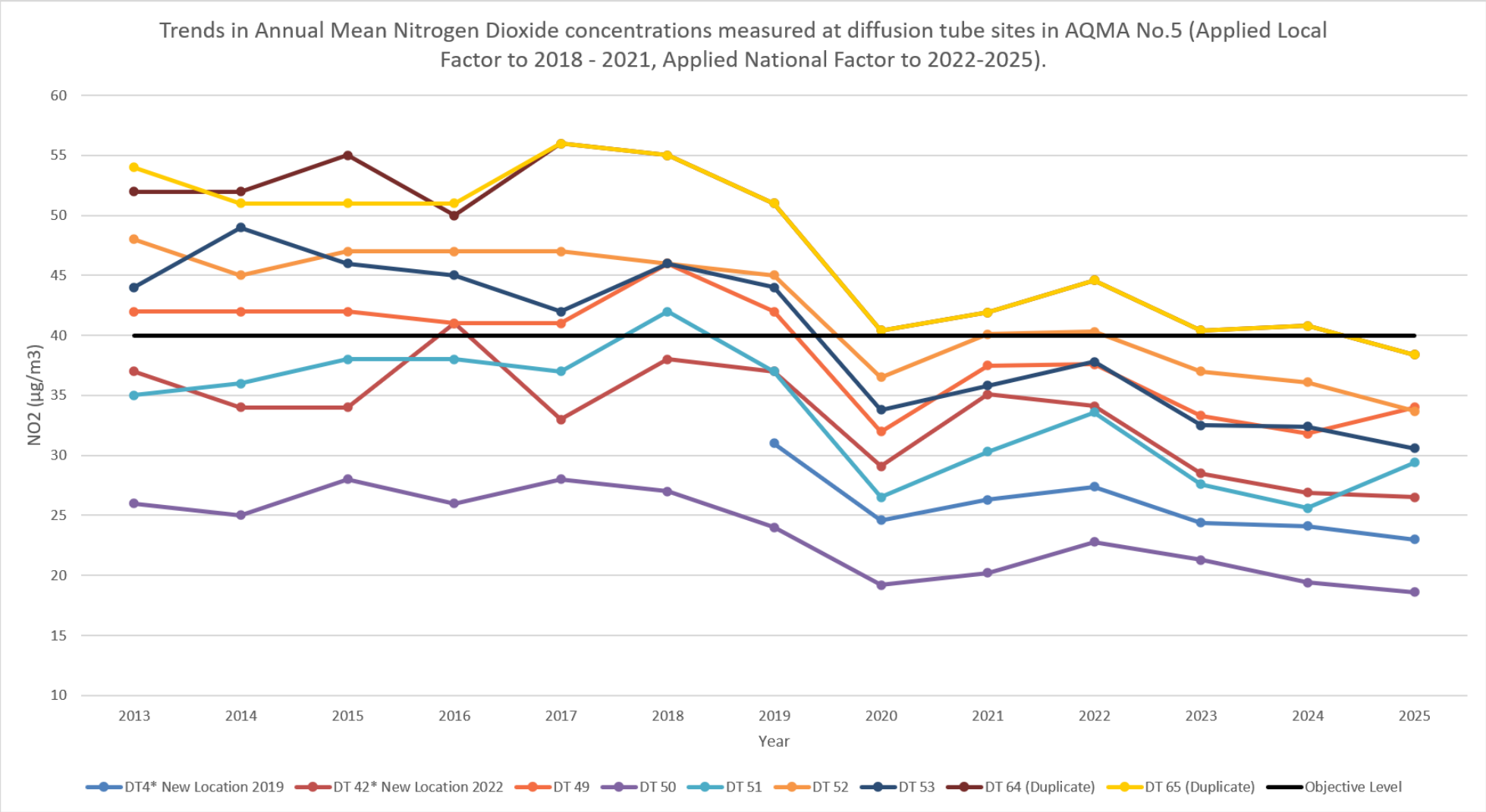


Figure A.6 – Trends in Annual Mean NO2 Concentrations outside of AQMA sites (other tubes between 1 – 19)

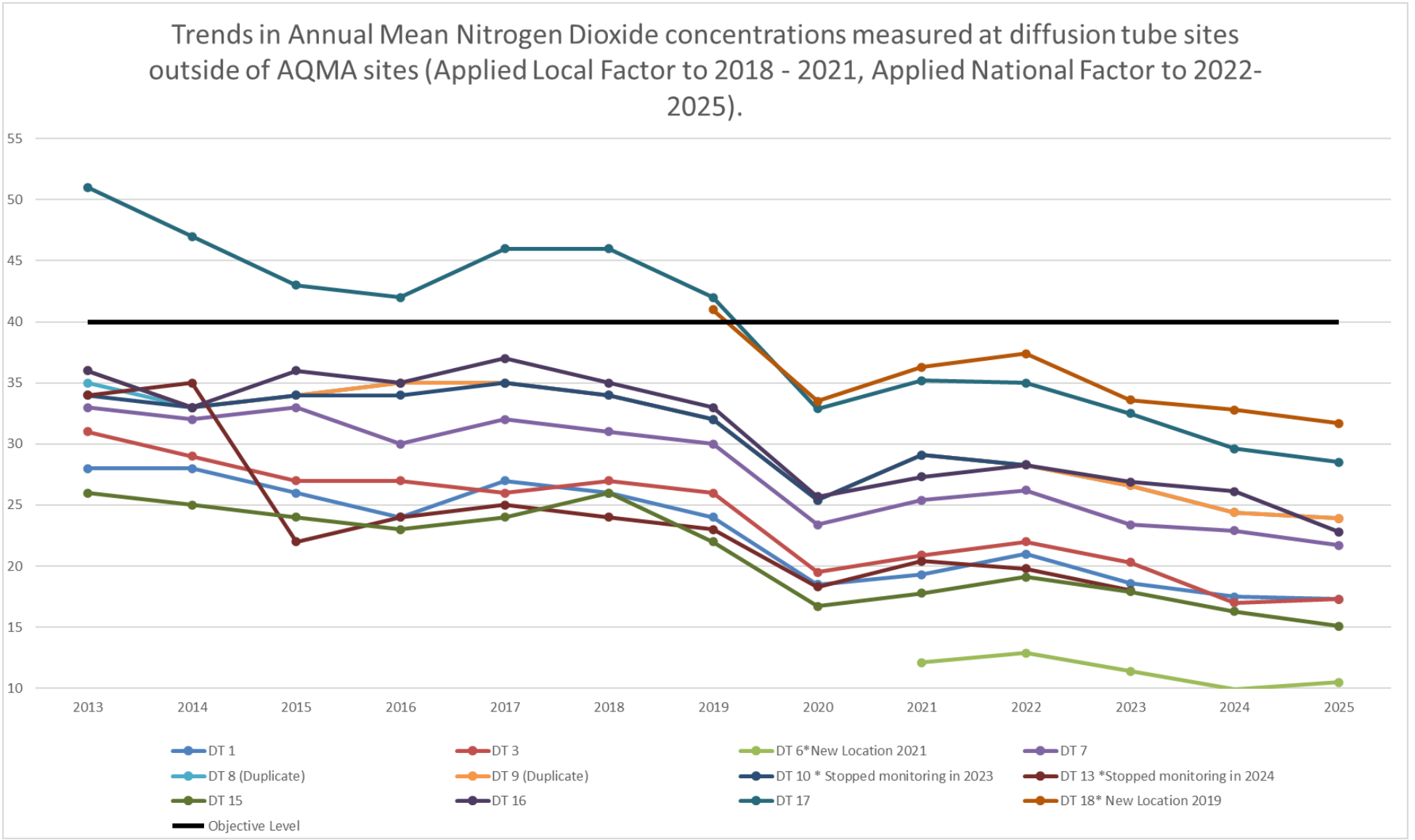


Figure A.7 – Trends in Annual Mean NO_2 Concentrations outside of AQMA sites (other tubes between 20 – 39)

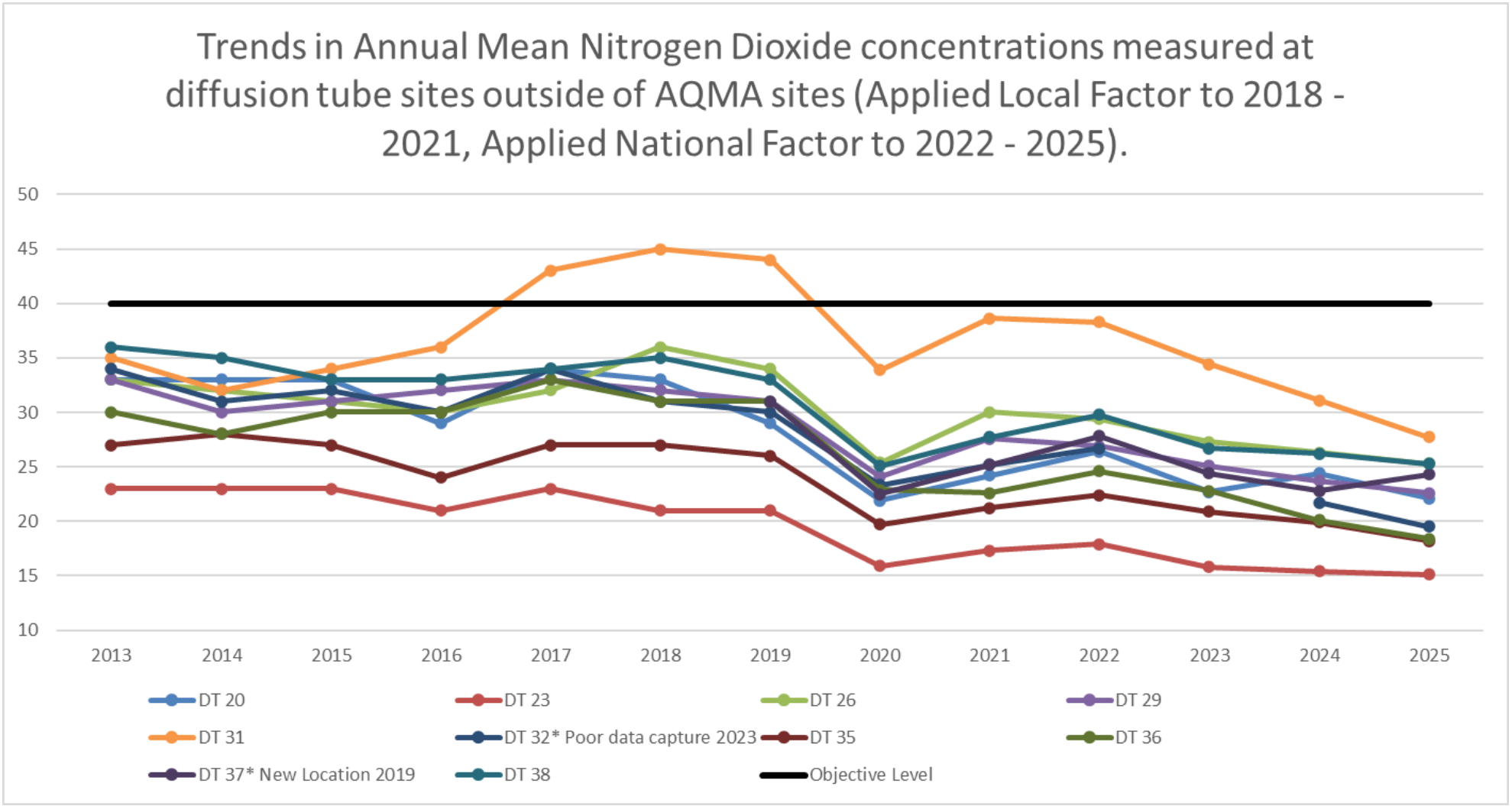


Figure A.8 – Trends in Annual Mean NO_2 Concentrations outside of AQMA sites (other tubes between 40 – 59)

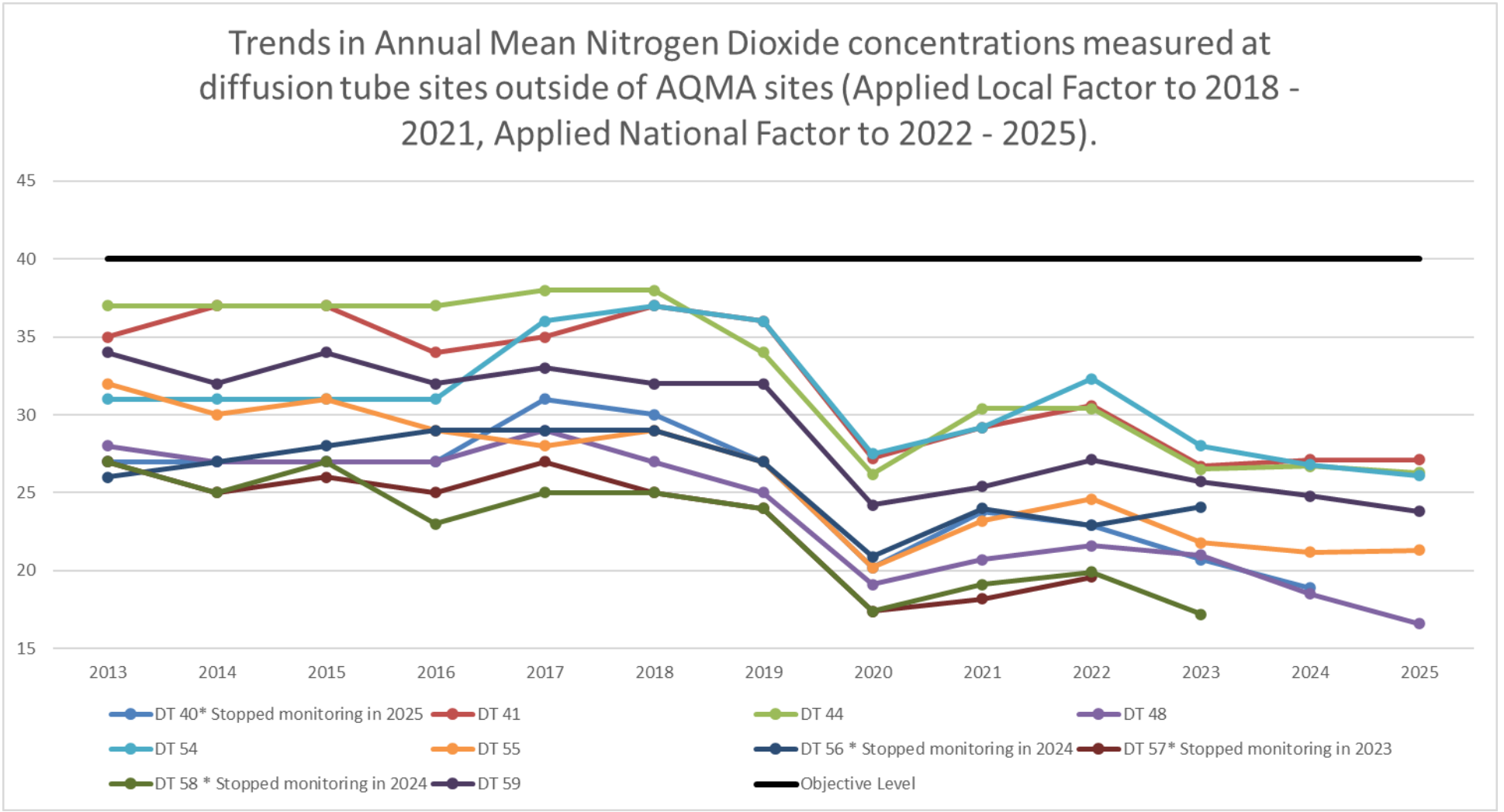


Figure A.9 – Trends in Annual Mean NO_2 Concentrations outside of AQMA sites (other tubes between 60 – 79)

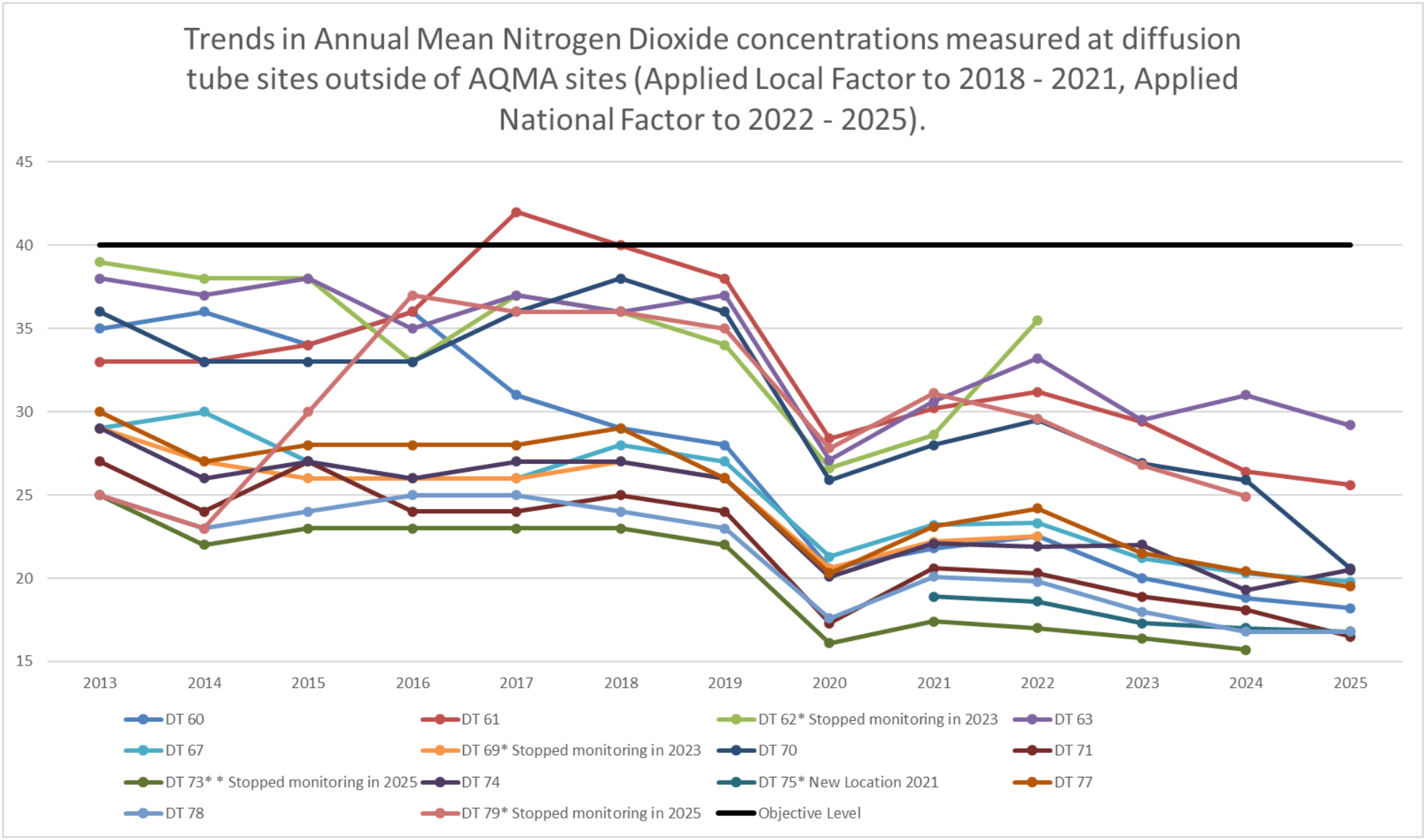


Figure A.10 – Trends in Annual Mean NO_2 Concentrations outside of AQMA sites (other tubes between 80 – 89)

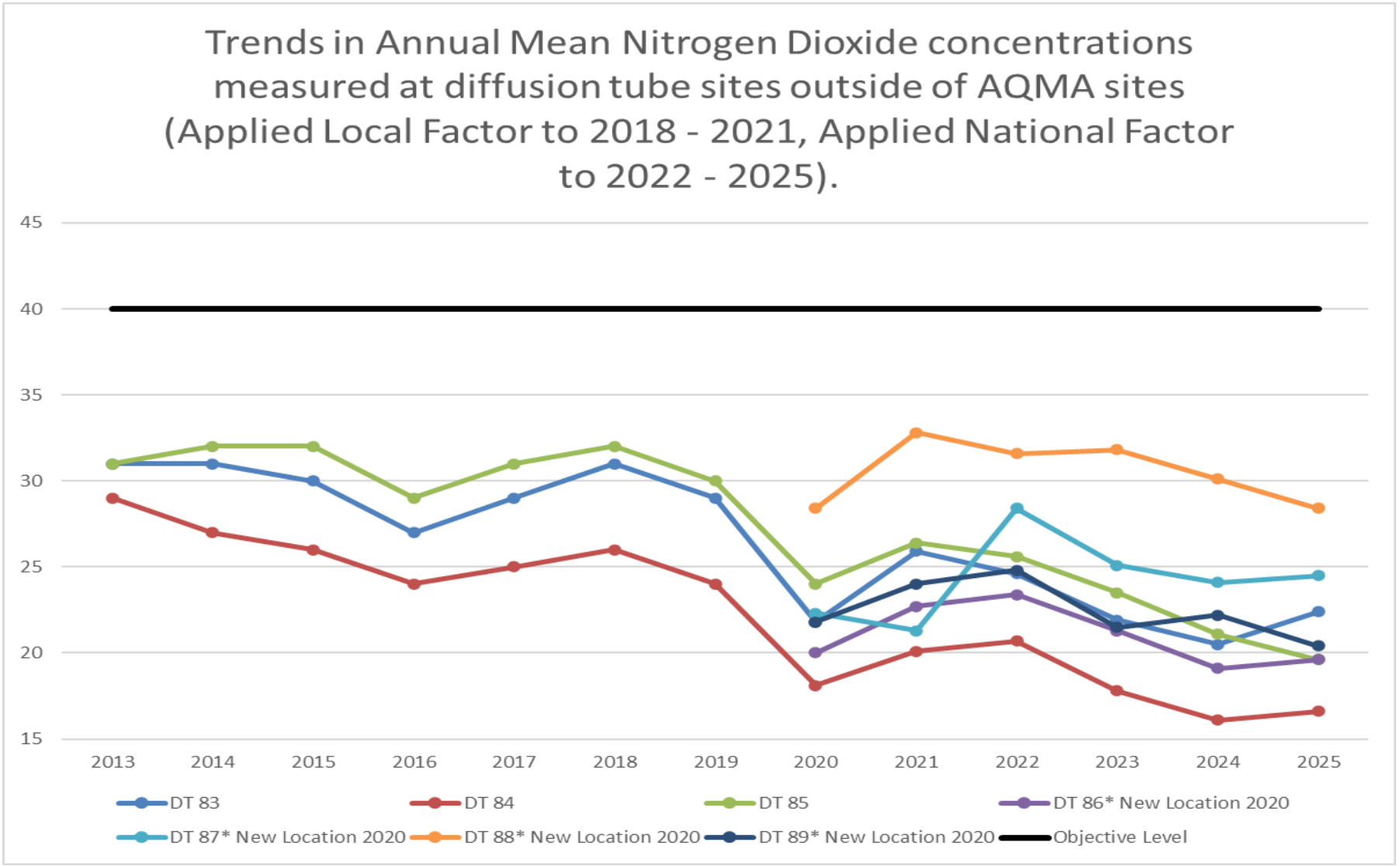


Figure A.11 – Trends in Annual Mean NO_2 Concentrations outside of AQMA sites (other tubes between 80 – 89)

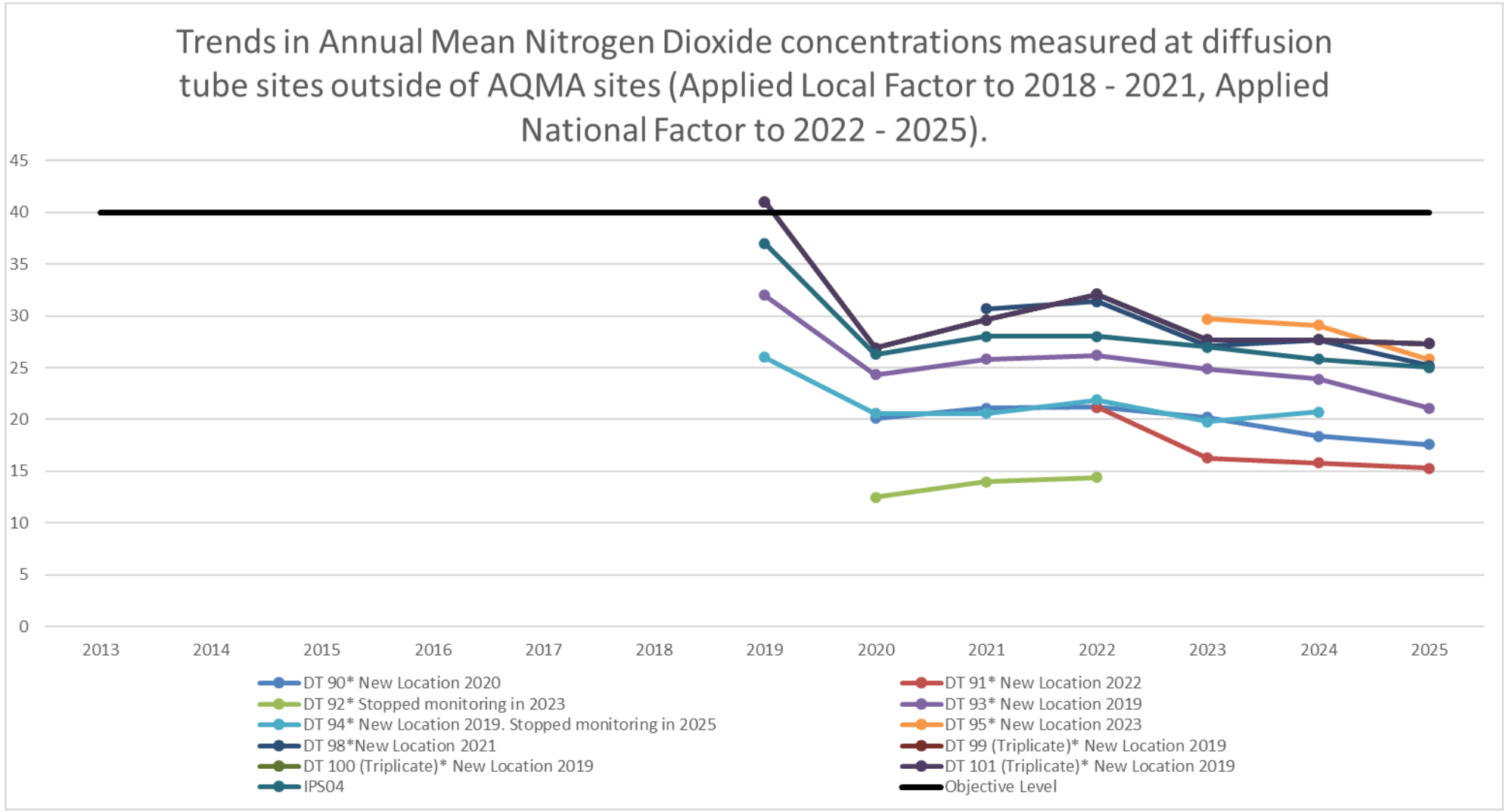


Table A.5 – 1-Hour Mean NO_2 Monitoring Results, Number of 1-Hour Means > 200µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2021	2022	2023	2024	2025
IPS04	615870	244858	Roadside	99.1	99.1	0	0	0	0	0

Notes:

Results are presented as the number of 1-hour periods where concentrations greater than 200µg/m^3 have been recorded.

Exceedances of the NO_2 1-hour mean objective (200µg/m^3 not to be exceeded more than 18 times/year) are shown in **bold**.

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

(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%).

Table A.6 – Annual Mean PM_{10} Monitoring Results ($\mu g/m^3$)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2021	2022	2023	2024	2025
IPS05	617007	244528	Roadside	93.7	93.7	N/A	N/A	13.6	13.9	15.5

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

Notes:

The annual mean concentrations are presented as $\mu g/m^3$.

Exceedances of the PM_{10} annual mean objective of $40\mu g/m^3$ are shown in **bold**.

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.

(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.12 – Trends in Annual Mean PM_{10} Concentrations

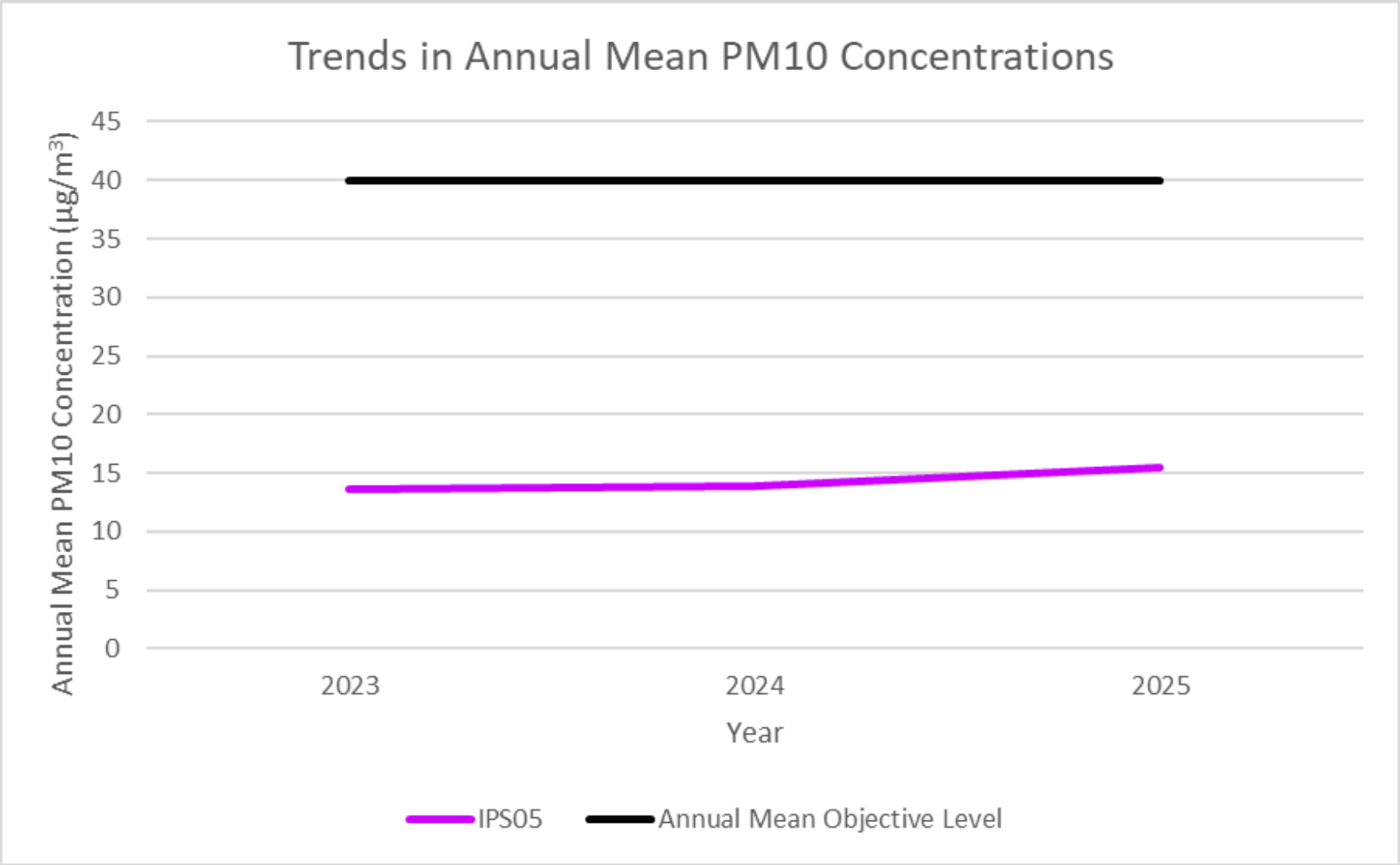


Table A.7 – 24-Hour Mean PM_{10} Monitoring Results, Number of PM_{10} 24-Hour Means > 50µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2021	2022	2023	2024	2025
IPS05	617007	244528	Roadside	93.7	93.7	N/A	N/A	0	0(26)	5

Notes:

Results are presented as the number of 24-hour periods where daily mean concentrations greater than 50µg/m^3 have been recorded.

Exceedances of the PM_{10} 24-hour mean objective (50µg/m^3 not to be exceeded more than 35 times/year) are shown in **bold**.

If the period of valid data is less than 85%, the 90.4th percentile of 24-hour means is provided in brackets.

(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.13 – Trends in Number of 24-Hour Mean PM_{10} Results > 50µg/m^3

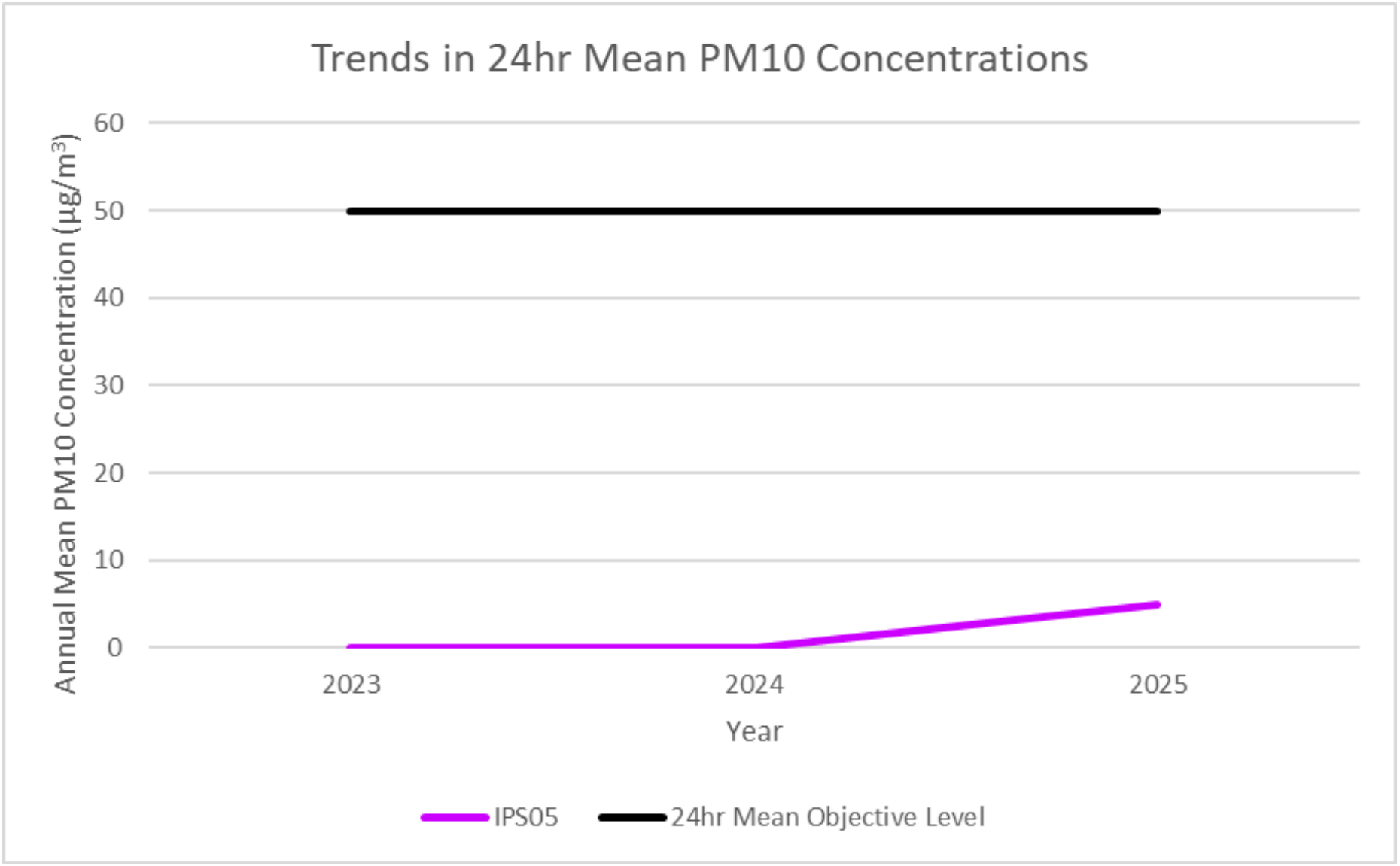


Table A.8 – Annual Mean $PM_{2.5}$ Monitoring Results (µg/m^3)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2021	2022	2023	2024	2025
IPS05	617007	244528	Roadside	93.7	93.7	N/A	N/A	8.0	8.1	9.0

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

Notes:

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

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.

(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.14 – Trends in Annual Mean $PM_{2.5}$ Concentrations

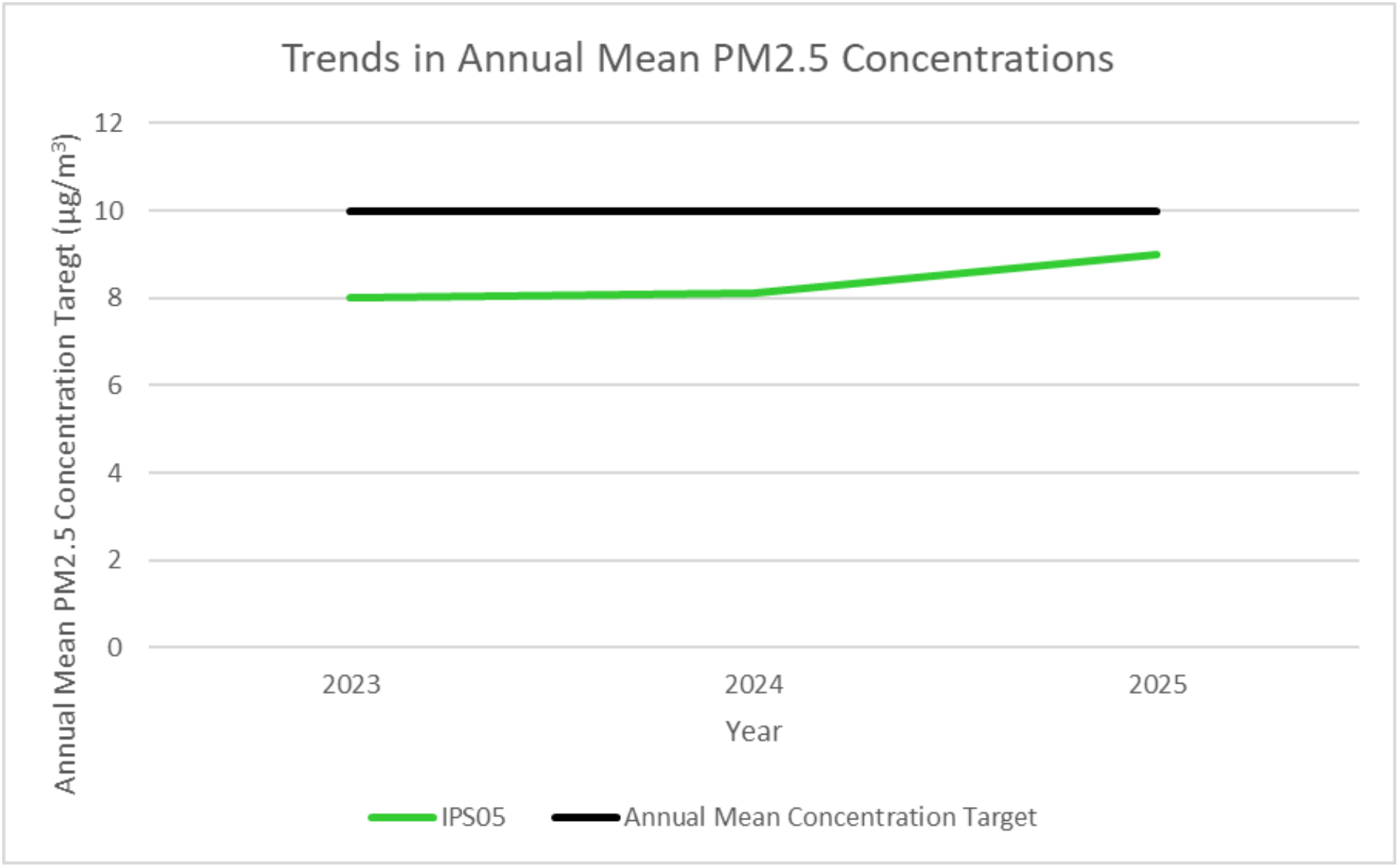


Figure A.15 – Hourly $PM_{2.5}$ concentrations at Ipswich St Helens Street and Norwich Lakenfields AURN site, 2025

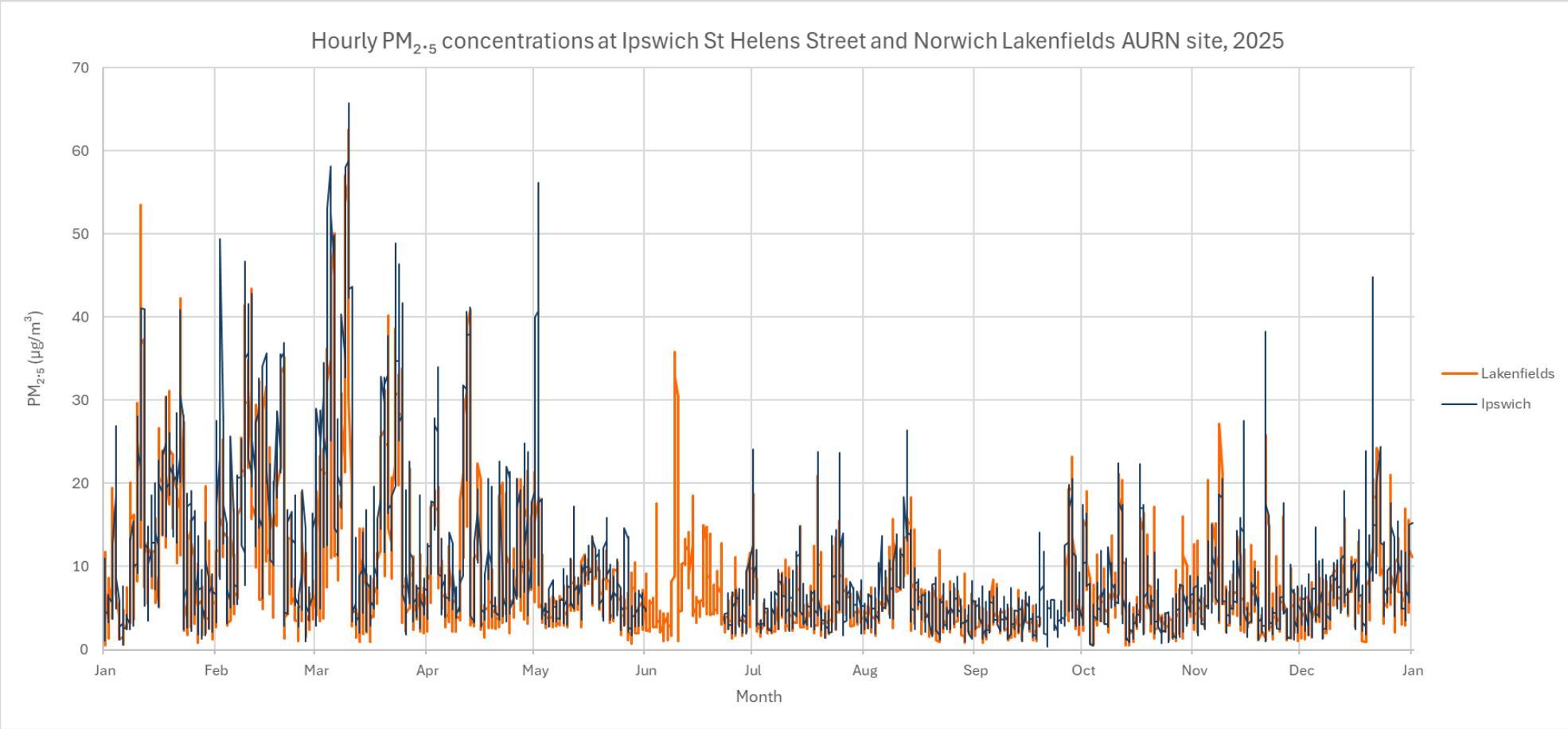


Figure A.16 – Hourly $PM_{2.5}$ concentrations at Ipswich St Helens Street and Wicken Fen AURN site, 2025

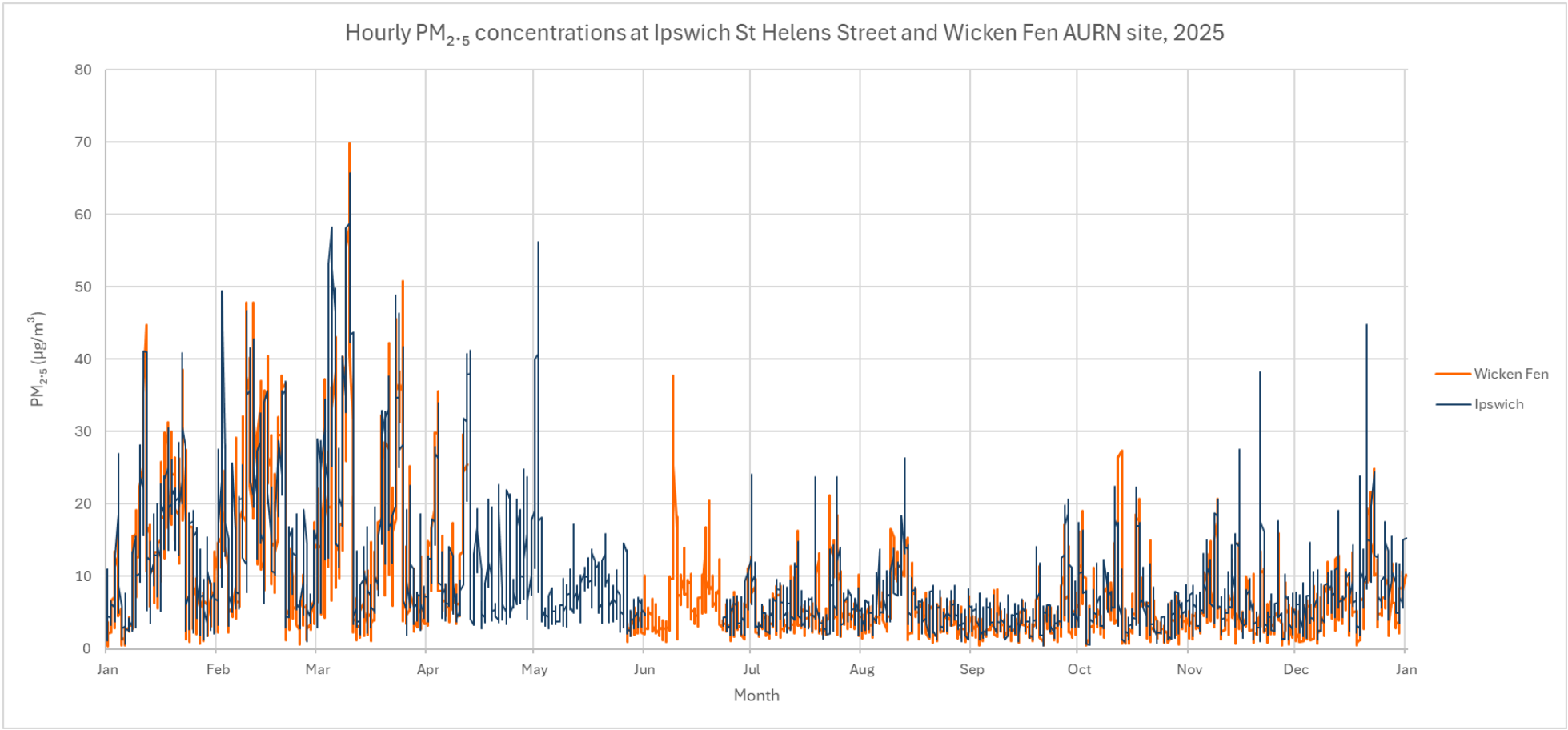


Figure A.17 – Hourly $PM_{2.5}$ concentrations at Ipswich St Helens Street and Portsmouth Anglesea Road AURN site, 2025

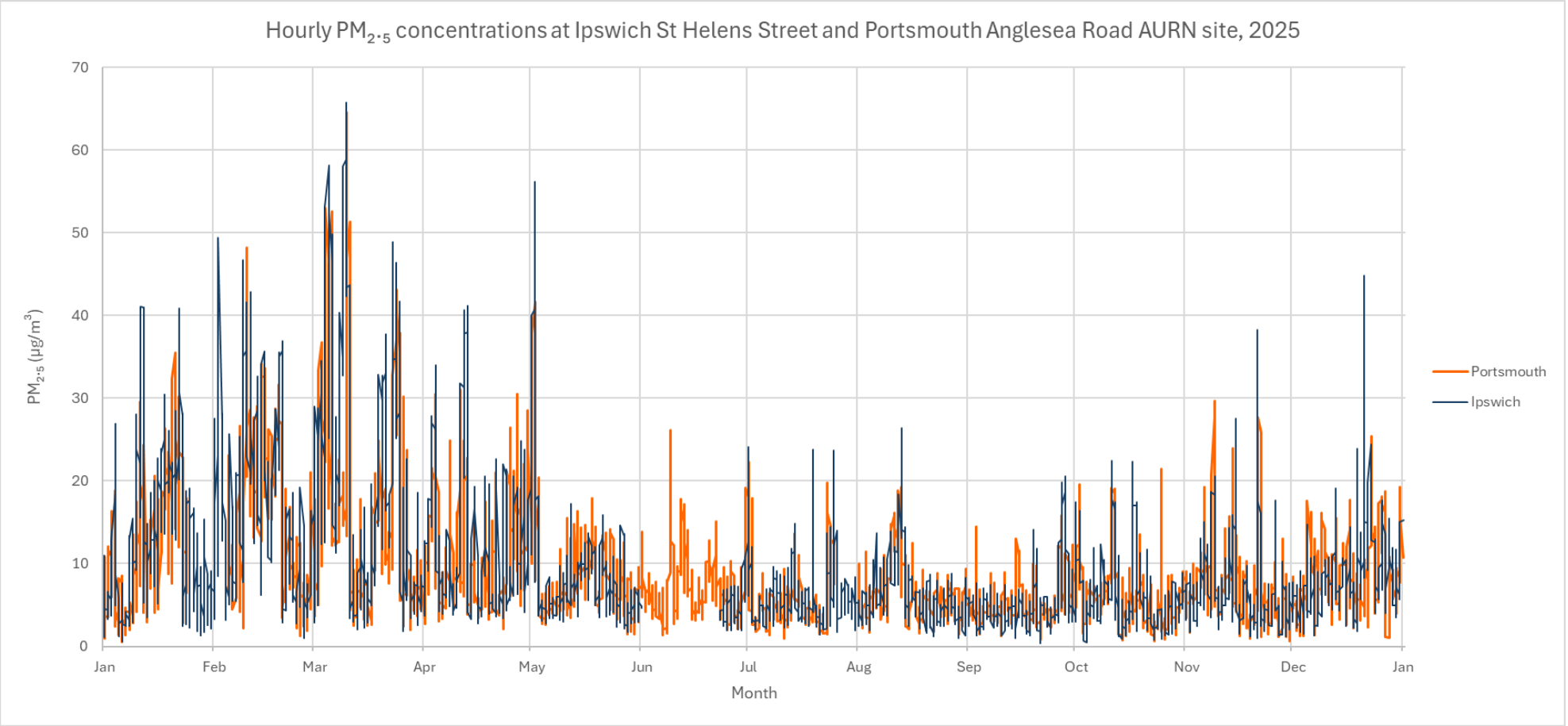
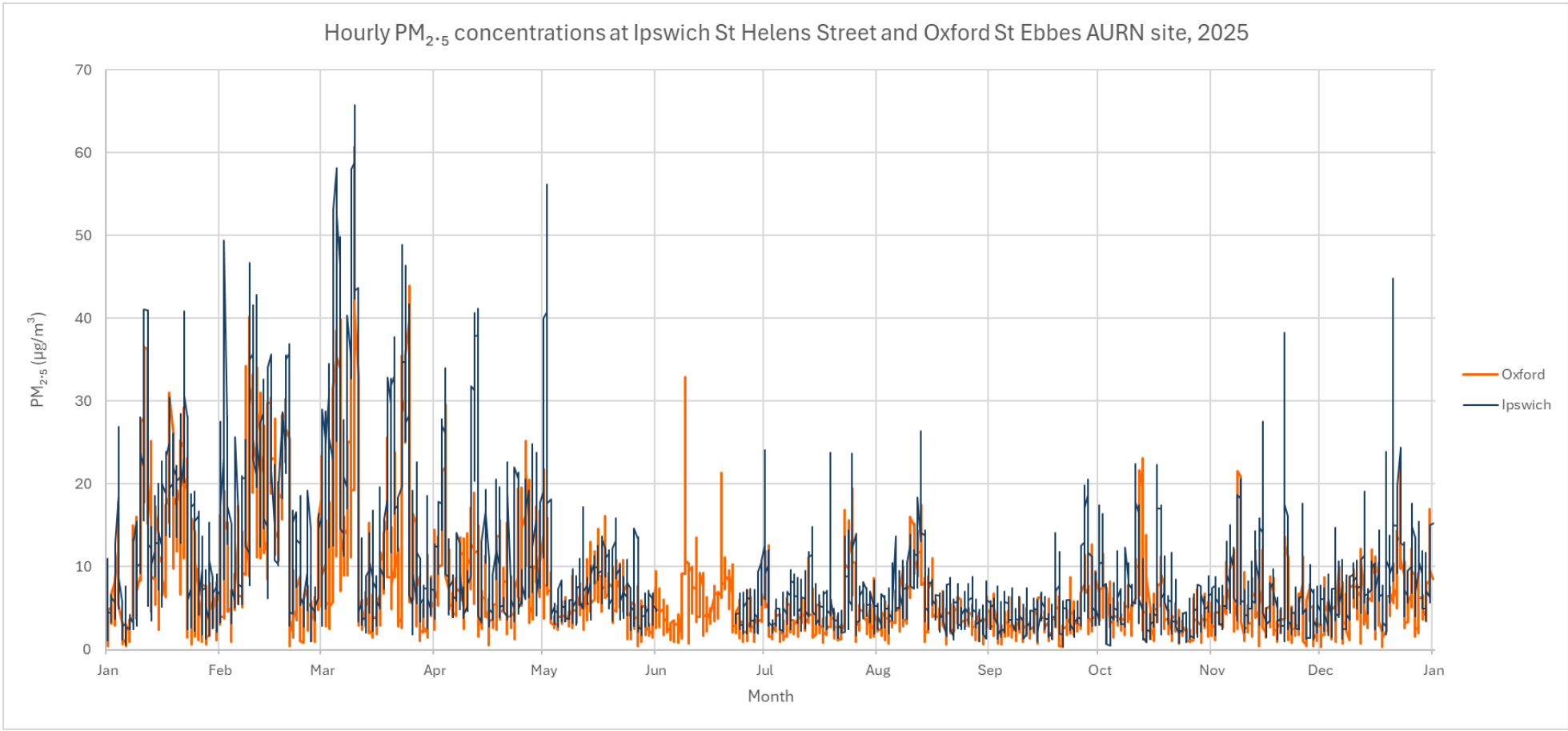


Figure A.18 – Hourly $PM_{2.5}$ concentrations at Ipswich St Helens Street and Oxford St Ebbes AURN site, 2025



Appendix B: Full Monthly Diffusion Tube Results for 2025

Table B.1 – NO_2 2025 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 0.78	Annual Mean: Distance Corrected to Nearest Exposure	Comment
1	615992	244412	32.1	23.1	29.5	18.7	15.6	22.6	17.3	15.2	19.2	20.3	28.4	24.1	22.2	17.3	-	
2	615144	245245	39.0	42.2	40.7	42.9	28.1	40.5	30.1	32.8	35.1	30.8	36.8	33.5	36.0	28.1	-	
3	617070	244039	36.3	20.2	28.8	21.3	15.0	23.4	18.5	16.6	21.9	21.1	24.1	18.6	22.2	17.3	-	
4	615620	245000	33.3	38.5	43.0	38.7	26.5	30.1	13.7	23.0	23.2	22.0	30.6	30.6	29.4	23.0	-	
5	616887	244128	28.3	39.5	43.0	32.4	29.9	38.0	37.5	32.4	36.4	36.0	41.7	37.2	36.0	28.1	-	
6	617288	244429	20.0	15.4	17.8	12.3	8.3	11.8	10.4	9.2	12.0	12.3	16.3	15.3	13.4	10.5	-	
7	615007	245239	39.2	32.6	32.6	24.3	19.5	29.4	21.5	24.4	26.0	26.0	28.0	30.1	27.8	21.7	-	
8	615125	245209	36.0	34.6	40.7	34.3	27.7	29.1	27.8	23.0	27.4	28.3	32.2	28.1	-	-	-	Duplicate Site with 8 and 9 - Annual data provided for 9 only
9	615125	245209	29.8	36.5	35.8	34.6	26.6	30.2	28.2	23.5	26.8	29.8	30.7	32.8	30.6	23.9	-	Duplicate Site with 8 and 9 - Annual data provided for 9 only
11	616593	244753	52.1	41.4	42.3	38.0	31.7	51.4	43.9	36.9	44.4	43.6	44.6	39.7	-	-	-	Triplicate Site with 11, 12 and 19 - Annual data provided for 19 only
12	616593	244753	51.4	48.2	44.4	35.8	32.7	51.7	44.9	39.9	44.2	45.7	51.2	32.9	-	-	-	Triplicate Site with 11, 12 and 19 - Annual data provided for 19 only
14	615285	245393	44.6	42.1	47.4	40.9	32.6	37.9	37.0	31.5	34.6	34.2	38.5	35.3	38.1	29.7	-	
15	616282	244643	32.1	9.2	26.9	21.4	13.1	15.2	14.1	13.7	18.3	17.5	28.4	21.8	19.3	15.1	-	
16	615362	245437	35.3	33.3	32.6	21.8	22.0	35.2	24.2	28.9	31.0		30.4	26.8	29.2	22.8	-	Soil in tube in October so result discarded as spuriously low
17	616993	244659	30.8	47.0	46.5	36.2	30.7	37.9	34.2	31.9	36.5	32.5		37.4	36.5	28.5	-	Tube missing for November
18	615090	245178	41.0	49.5	48.6	46.4	35.7	41.9	31.2	38.5	38.2	34.7	41.7	40.4	40.7	31.7	-	
19	616593	244753	58.8	42.9	42.6		28.1	50.0	41.0	38.8	45.7	42.1	46.9	37.6	42.9	33.5	-	Triplicate Site with 11, 12 and 19 - Annual data provided for 19 only. Tube Missing for April.
20	616458	244829	37.3	28.0	32.2	26.5	26.2				22.6	26.0	31.5	25.1	28.4	22.1	-	Tube missing for June, July, August

21	616494	244807	41.8	37.3	40.6	33.5	30.6	32.3	30.0	26.4	28.4	31.1	36.8	32.6	33.5	26.1	-	
22	616489	244785	33.0	40.2	41.1	36.1	28.5	40.2	33.1	25.6	28.5	28.6	37.3	33.7	33.8	26.4	-	
23	616645	244784	31.7	21.4	25.8	18.1	14.4	18.1	15.2	14.5	17.3	15.8	17.9	21.8	19.3	15.1	-	
24	616663	244692	40.6	41.1	43.1	31.8	27.8		33.0	30.9	36.0	36.9	45.4	37.8	36.8	28.7	-	Tube missing for June
25	616753	244582	44.6	41.4	41.4	31.1	28.0	35.9	34.8	29.7	36.4	36.7	39.9	33.1	36.1	28.1	-	
26	616971	244511	40.7	31.5	42.2	42.0	28.9	31.8	33.0	26.8	29.5	25.4	27.6	30.2	32.5	25.3	-	
27	616965	244546	43.5	39.9	39.2	27.9	26.2	36.0	30.9	28.4	30.4	31.5	35.3	33.2	33.5	26.2	-	
28	615194	245292	47.9	40.3	39.0	36.5	21.2	32.6	24.8	26.8	31.8	28.7	36.6	35.0	33.4	26.1	-	
29	617118	244074	33.5	30.0	38.9	32.8	27.6	29.0	29.1	24.0	25.6	25.2	25.6	26.3	29.0	22.6	-	
30	616939	244114	53.4	45.1	45.6	40.3	32.3	51.6	39.0	40.7	40.3	24.1	46.1	42.5	41.8	32.6	-	
31	616332	244149	33.0	44.2	36.8	35.8	27.4	40.5	29.1	30.8	34.4	34.6	40.4	38.5	35.5	27.7	-	
32	617374	244577	38.4	28.9	30.8	22.2	17.6	21.4	20.4	16.3	20.8	24.8	30.8	27.7	25.0	19.5	-	
33	616666	244114	36.3	36.1	39.8	32.2	25.7	28.8	30.1	21.6	27.6	29.0	31.4	27.9	30.5	23.8	-	
34	616467	244072	31.8	32.9	22.3	27.1	19.7	28.9	26.6	23.4	26.8	27.7	35.3	29.4	27.7	21.6	-	
35	616746	244696	32.4	31.4	25.3	20.3	17.1	25.6	19.0	17.5	19.8	22.7	24.0	25.5	23.4	18.2	-	
36	616820	246158	40.2	17.0	28.5	20.0	16.1	26.2	18.6	18.4	22.2	23.2	27.8	25.5	23.6	18.4	-	
37	616845	244252	37.4	33.9	39.0	27.9	25.8	26.7	27.3	20.7	26.2	28.8	40.6	39.7	31.2	24.3	-	
38	615904	244805	36.5	37.3	41.2	27.8	25.7	34.7	28.9	29.6	30.9	29.0	35.9	31.9	32.5	25.3	-	
39	616712	244228	43.7	42.0	46.3	34.8	35.0	37.9	36.6	31.4	35.0	34.9	38.2	34.0	37.5	29.2	-	
41	615564	245010	51.0	35.8	39.7	30.5	22.9	37.4	28.8	30.3	34.2	31.5	39.2	34.9	34.7	27.1	-	
42	615744	244901	18.6	42.6	47.0	47.0	35.9	33.5	34.2	25.3	28.3	25.9	33.9	35.6	34.0	26.5	-	
43	615109	245200	45.8	39.3	43.1	36.7	27.3	34.3	28.5	26.2	30.7	31.6	21.5	37.0	33.5	26.1	-	
44	615052	245237	45.2	40.5	45.0	29.7	25.8	29.6	31.8	23.0	30.1	32.7	36.6	34.9	33.7	26.3	-	

45	615261	245350	33.1	31.6	31.7	22.8	17.1	19.4	20.0	18.6	23.0	21.0	27.5	16.1	23.5	18.3	-	
48	615425	245486	28.6	28.3	28.5	16.6	13.9	23.1	18.2	15.6	21.4	16.5	25.3	19.4	21.3	16.6	-	
49	615792	244876	50.5	51.2	61.0	53.7	39.3	40.4	37.7	34.0	36.3	35.0	44.8	38.7	43.6	34.0	-	
50	615773	244890	37.5	29.3	29.0	20.1	14.4	23.3	19.2	17.1	20.7	14.0	32.7	28.3	23.8	18.6	-	
51	615769	244866	47.4	45.0	57.1	40.6	28.6	35.2	29.5	29.0	31.4	28.6	41.5	38.0	37.7	29.4	-	
52	615826	244871	55.6	51.2	57.0	47.3	37.9	39.2	37.2	34.8	34.0	40.4	45.5	39.1	43.3	33.7	-	
53	615820	244858	54.2	42.5	39.7	34.5	27.7	44.0	32.5	33.8		36.1	40.1	46.6	39.2	30.6	-	Tube missing for September
54	615893	244855	51.9	33.4	36.1	32.0	23.7	31.5	24.1	28.4	26.5	31.8	40.9	41.0	33.4	26.1	-	
55	615917	244898	34.9	27.8	34.7	23.3		23.6	25.7	18.6	24.1	24.2	32.5	31.4	27.3	21.3	-	Tune missing for May
59	615926	244837	41.9	35.1	39.6	30.9	24.1	28.7	25.2	19.5	25.2	30.6	32.1	33.8	30.6	23.8	-	
60	617438	246168	32.7	27.2	26.4	24.0	15.9	24.3	18.8	18.2	21.9	19.3	26.9	24.6	23.4	18.2	-	
61	616099	246105	43.5	36.7	37.7	31.7	25.6	32.9	27.9	26.2	30.3	31.8	36.3	33.1	32.8	25.6	-	
63	615950	244790	42.2	40.6	45.5	39.1	28.8	44.3	33.6	30.2	38.8	35.1	36.4	35.2	37.5	29.2	-	
64	615688	244939	65.3	50.5	54.4	40.1	41.0	56.3	50.2	35.0	57.7	46.3	56.7	51.4	-	-	-	Duplicate Site with 64 and 65 - Annual data provided for 65 only
65	615688	244939	57.5	48.9	55.6	40.3	38.3	56.0	48.6	42.7	46.1	49.1	50.4	42.3	49.2	38.4	36.9	Duplicate Site with 64 and 65 - Annual data provided for 65 only
66	616807	244669	45.7	38.8	28.9	28.7	27.4	41.0	32.2	31.8	34.3	32.0	33.2	29.3	33.6	26.2	-	
67	616890	244676	38.8	31.7	33.6	21.9	15.9	23.6	18.2	18.2	22.9	18.7	33.6	27.3	25.4	19.8	-	
68	616905	244657	52.8	47.8	46.7	40.5	31.2	41.1	36.9	34.1	36.5	35.1	41.0	34.9	39.9	31.1	-	
70	616965	244583	41.1	21.6	37.1	21.4	21.0	27.7	25.5	20.6	25.1	20.0		30.0	26.5	20.6	-	Tube missing for November
71	617032	244537	31.4	24.0	27.8	18.9	16.6	18.8	18.9	14.2	19.4	17.6	22.6	23.1	21.1	16.5	-	
72	617123	244535	38.0	33.8	31.1	29.0	28.6	31.2	27.9	22.6	27.5	24.2	28.6	30.9	29.5	23.0	-	
74	616953	244443	36.3	32.3	33.3	26.6	17.9	23.7		18.6	22.1	22.6	28.3	27.4	26.3	20.5	-	Tube missing for July
75	616927	244395	32.5	26.9	26.7	19.8	12.9	17.1	15.3	16.1	20.5	20.0	24.9	25.0	21.5	16.8	-	

76	616951	244521	33.7	37.5	39.7	36.5	22.5		28.4	26.2		30.1	35.8	33.4	32.4	25.3	-	Tube missing for June and September
77	616902	244542	24.7	31.1	37.9	26.0	21.8	22.2	22.4	19.2	21.7	22.3	24.2	26.1	25.0	19.5	-	
78	616870	244586	24.2	29.2	30.2	21.5	14.9	21.4	16.1	12.8	18.4	16.2	27.7	26.0	21.6	16.8	-	
80	616821	244546	32.5	37.0	39.3	30.9	24.3	36.2	31.1	24.7	33.9	31.1	36.7	35.2	-	-	-	Triplicate Site with 80, 81 and 82 - Annual data provided for 82 only
81	616821	244546	47.3	32.9	37.8	24.2	21.8	34.4	29.4	27.6	32.4	33.1	39.6	32.7	-	-	-	Triplicate Site with 80, 81 and 82 - Annual data provided for 82 only
82	616821	244546	48.3	39.9	40.6	28.6	24.4	38.1	31.9	27.5	33.7	29.3		33.4	33.3	26.0	-	Triplicate Site with 80, 81 and 82 - Annual data provided for 82 only. Tube missing for November.
83	616792	244498	41.6	35.7	35.5	26.4	21.1	22.9		20.3	28.4	22.2	32.7	29.5	28.8	22.4	-	Tube missing for July
84	616702	244601	31.3			20.8	16.8		20.9	17.6	19.6	21.2	26.0	17.4	21.3	16.6	-	Tube missing for February, March and June
85	616681	244623	21.4	25.4	31.1	24.4	18.1	30.5	23.6	21.8	26.8	24.3	29.2	24.7	25.1	19.6	-	
86	616727	244566	27.4	28.8	36.3	24.6	16.9	22.1	22.1	20.9	24.2	24.6	28.3	25.3	25.1	19.6	-	
87	616481	244725	42.8	38.5	41.5	36.5	24.0	29.0	24.5	21.5	24.7	25.3	36.3	31.6	31.4	24.5	-	
88	616307	243875	46.3	39.6	44.1	29.4	32.1	37.8	32.7	28.5	32.8	34.0	41.7	38.6	36.5	28.4	-	
89	614816	244585	33.8	34.2	35.9	25.7	20.5	24.1	18.6	20.1	24.6	21.1	32.6	23.3	26.2	20.4	-	
90	614893	244558	13.9	30.9	30.2	22.0	17.1	24.8	19.1	16.6	22.8	21.4	28.8		22.5	17.6	-	Tube missing for December
91	615195	244621	23.5	25.2	28.3	19.8	14.5	20.4	13.1	13.6	17.5	16.7	22.7	20.1	19.6	15.3	-	
93	617360	244536	34.2	25.3	31.7	23.7	20.3	28.5	23.9	20.5	25.2	28.4	32.0	30.3	27.0	21.1	-	
95	616424	243804	15.0	48.6	46.4	32.9	31.3	33.7	31.1	27.7	32.8	31.3	30.5	35.8	33.1	25.8	-	
96	616279	244807	51.6	45.5	51.0	42.8	32.6	41.1	34.4	30.9	37.6	31.6	34.0	38.5	39.3	30.7	-	
97	616474	244795	48.5	47.3	49.7	41.1	34.3	35.7	33.3	31.6	32.1	35.7	40.6	32.6	38.5	30.1	-	
98	617037	244085	31.4	30.4	39.0	32.6	26.8	36.4	33.1	31.3	33.0	30.1	36.5	27.6	32.4	25.2	-	
99	615870	244858	38.5	36.2	43.1	34.6	27.7	35.2	28.5	23.6	31.8	28.8	40.9		-	-	-	Triplicate Site with 99, 100 and 101 - Annual data provided for 101 only. Tube result missing December
100	615870	244858	38.2	42.1	48.5	38.1	27.9	31.5	29.5	29.7	32.2	26.1	40.8		-	-	-	Triplicate Site with 99, 100 and 101 - Annual data provided for 101 only. Tube result missing December

101	615870	244858	38.6	41.7	45.8	36.9	30.9	35.0	22.9	29.1	30.1		41.8	42.6	35.0	27.3	-	Triplicate Site with 99, 100 and 101 - Annual data provided for 101 only. Discarded for October as tube vandalised

☒ **All erroneous data has been removed from the NO_2 diffusion tube dataset presented in Table B.1**

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

☒ **National bias adjustment factor used**

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

☒ **Ipswich Borough Council confirm that all 2025 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System**

Notes:

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

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

See Appendix C for details on bias adjustment and annualisation.

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

New or Changed Sources Identified Within Ipswich During 2025

Environmental Health Officers have commented on a wide range of planning applications from an air quality perspective in the reporting year of 2025. None are reported to have an significant impact on the AQMAs and on air quality within the borough.

A planning application was granted for an extension to a Community Diagnostic Centre (CDC) on Museum Street (outside of any AQMA, but in a town centre location). The application included the provision of a standby generator. The Air Quality Assessment provided in support of the application indicated that the impacts were not predicted to be significant at sensitive locations in the vicinity of the site. The application was approved subject to conditions, one of which was to ensure the generator is installed and maintained in accordance with the Air Quality Assessment and it does not operate for no greater than 27 hours per rolling annum period.

Additional Air Quality Works Undertaken by Ipswich Borough Council During 2025

Due to a continued absence of exceedances of the annual mean NO_2 objective level in AQMA 3, the Council intend to revoke the AQMA. A copy of the Detailed Assessment supporting the revocation of AQMA 3 is attached to Appendix E.

In addition, as part of a drive to better understand the contributing factors to Ipswich's AQMAs, Suffolk County Council commissioned Ricardo Consulting to develop a technical report. The report, finalised Summer 2025, explored the potential causes of the Ipswich Air Quality Management Areas and identified potential solutions for lowering pollution levels.

The report identified that the key source of air pollution within the Ipswich AQMAs is road transport, primarily from diesel and petrol cars, light goods vehicles and buses. It was concluded that upgrading buses to electric and investing in active travel infrastructure to encourage more walking and cycling, would each reduce levels of harmful pollutants within the AQMAs.

In addition, each could save an estimated £20million over the next 10 years in improved health outcomes, reduced demand on healthcare services, and economic benefits from reductions in sickness absence. This demonstrates that targeted actions to reduce transport-related pollution, even by modest amounts, can offer significant health and economic savings. Evidence within the report is now being used to inform ongoing transport strategy, the design and delivery of schemes, and support funding bids, where appropriate.

QA/QC of Diffusion Tube Monitoring

Nitrogen dioxide diffusion tubes are supplied by SOCOTEC, Didcot. The method of preparation is 50% TEA in acetone.

Monitoring has been completed in accordance with the 2025 Diffusion Tube Monitoring Calendar. The exposed tubes are analysed in accordance with SOCOTEC's standard operating procedure which complies with the guidelines set out in DEFRA's 'Diffusion Tubes for Ambient NO2 Monitoring: Practical Guidance'. The analysis of diffusion tube samples to determine the amount of nitrogen dioxide present on the tubes is within the scope of their UKAS schedule. SOCOTEC participates in the AIR NO2 PT scheme, the results of which indicate that between January 2024 – February 2026 100% of QC samples reported were analysed satisfactorily, with the exception of the period October – December 2025 where 87.5% of QC samples were analysed satisfactorily.

Using the AEA_DifTPAB_v04.xls spreadsheet published on the DEFRA LAQM Support website to check the precision of collocated tubes, the results for all collocated monitoring sites within Ipswich were shown to demonstrate "Good precision" with the exception of Period 1 at St Helens Street (see Figure C.1). A control tube (travel blank) is sent with each month's tubes.

Figure C.1 – Precision and Accuracy of Collated Diffusion Tubes

a) Bramford Road (Site ID 8 & 9)

Checking Precision and Accuracy of Triplicate Tubes

AEA Energy & Environment
From the AEA group

Diffusion Tubes Measurements

Period	Start Date dd/mm/yyyy	End Date dd/mm/yyyy	Tube 1 µgm^{-3}	Tube 2 µgm^{-3}	Tube 3 µgm^{-3}	Triplicate Mean	Standard Deviation	Coefficient of Variation (CV)	95% CI of mean
1	08/01/2025	05/02/2025	36.0	29.8		33	4.4	13	39.4
2	05/02/2025	04/03/2025	34.6	36.5		36	1.3	4	12.1
3	04/03/2025	01/04/2025	40.7	35.8		38	3.5	9	31.1
4	01/04/2025	29/04/2025	34.3	34.6		34	0.2	1	1.9
5	29/04/2025	04/06/2025	27.7	26.6		27	0.8	3	7.0
6	04/06/2025	01/07/2025	29.1	30.2		30	0.8	3	7.0
7	01/07/2025	06/08/2025	27.8	28.2		28	0.3	1	2.5
8	06/08/2025	04/09/2025	23.0	23.5		23	0.4	2	3.2
9	04/09/2025	01/10/2025	27.4	26.8		27	0.4	2	3.8
10	01/10/2025	04/11/2025	28.3	29.8		29	1.1	4	9.5
11	04/11/2025	02/12/2025	32.2	30.7		31	1.1	3	9.5
12	02/12/2025	07/01/2026	28.1	32.8		30	3.3	11	29.9
13									

It is necessary to have results for at least two tubes in order to calculate the precision of the measurements

Automatic Method		Data Quality Check	
Period Mean	Data Capture (% DC)	Tubes Precision Check	Automatic Monitor Data
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
Overall survey -->		Good precision	

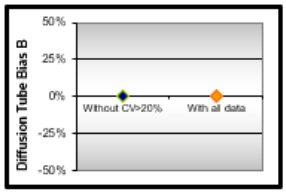
Site Name/ ID: Bramford Road

Precision 12 out of 12 periods have a CV smaller than 20%

(Check average CV & DC from Accuracy calculations)

Accuracy (with 95% confidence interval)
without periods with CV larger than 20%
Bias calculated using 0 periods of data
Bias factor A
Bias B
Diffusion Tubes Mean: µgm^{-3}
Mean CV (Precision):
Automatic Mean: µgm^{-3}
Data Capture for periods used:
Adjusted Tubes Mean: µgm^{-3}

Accuracy (with 95% confidence interval)
WITH ALL DATA
Bias calculated using 0 periods of data
Bias factor A
Bias B
Diffusion Tubes Mean: µgm^{-3}
Mean CV (Precision):
Automatic Mean: µgm^{-3}
Data Capture for periods used:
Adjusted Tubes Mean: µgm^{-3}



Jaume Targa, for AEA
Version 04 - February 2011

b) Piper's Court (Site ID: 11, 12 & 19)

Checking Precision and Accuracy of Triplicate Tubes

AEA Energy & Environment
From the AEA group

Diffusion Tubes Measurements

Period	Start Date dd/mm/yyyy	End Date dd/mm/yyyy	Tube 1 µgm^{-3}	Tube 2 µgm^{-3}	Tube 3 µgm^{-3}	Triplicate Mean	Standard Deviation	Coefficient of Variation (CV)	95% CI of mean
1	08/01/2025	05/02/2025	52.1	51.4	58.8	54	4.1	8	10.1
2	05/02/2025	04/03/2025	41.4	48.2	42.9	44	3.6	8	8.9
3	04/03/2025	01/04/2025	42.3	44.4	42.6	43	1.1	3	2.8
4	01/04/2025	29/04/2025	38.0	35.8		37	1.6	4	14.0
5	29/04/2025	04/06/2025	31.7	32.7	28.1	31	2.4	8	6.0
6	04/06/2025	01/07/2025	51.4	51.7	50.0	51	0.9	2	2.3
7	01/07/2025	06/08/2025	43.9	44.9	41.0	43	2.0	5	5.0
8	06/08/2025	04/09/2025	36.9	39.9	38.8	39	1.5	4	3.8
9	04/09/2025	01/10/2025	44.4	44.2	45.7	45	0.8	2	2.0
10	01/10/2025	05/11/2025	43.6	45.7	42.1	44	1.8	4	4.5
11	05/11/2025	02/12/2025	44.6	51.2	46.9	48	3.4	7	8.3
12	02/12/2025	07/01/2026	39.7	32.9	37.6	37	3.5	9	8.6
13									

It is necessary to have results for at least two tubes in order to calculate the precision of the measurements

Automatic Method		Data Quality Check	
Period Mean	Data Capture (% DC)	Tubes Precision Check	Automatic Monitor Data
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
Overall survey -->		Good precision	

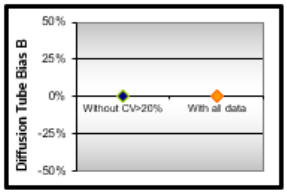
Site Name/ ID: Pipers Court

Precision 12 out of 12 periods have a CV smaller than 20%

(Check average CV & DC from Accuracy calculations)

Accuracy (with 95% confidence interval)
without periods with CV larger than 20%
Bias calculated using 0 periods of data
Bias factor A
Bias B
Diffusion Tubes Mean: µgm^{-3}
Mean CV (Precision):
Automatic Mean: µgm^{-3}
Data Capture for periods used:
Adjusted Tubes Mean: µgm^{-3}

Accuracy (with 95% confidence interval)
WITH ALL DATA
Bias calculated using 0 periods of data
Bias factor A
Bias B
Diffusion Tubes Mean: µgm^{-3}
Mean CV (Precision):
Automatic Mean: µgm^{-3}
Data Capture for periods used:
Adjusted Tubes Mean: µgm^{-3}



Jaume Targa, for AEA
Version 04 - February 2011

c) Norwich Road (Site ID: 64 & 65)

Checking Precision and Accuracy of Triplicate Tubes

AEA Energy & Environment
From the AEA group

Diffusion Tubes Measurements

Period	Start Date dd/mm/yyyy	End Date dd/mm/yyyy	Tube 1 µgm^{-3}	Tube 2 µgm^{-3}	Tube 3 µgm^{-3}	Triplicate Mean	Standard Deviation	Coefficient of Variation (CV)	95% CI of mean
1	08/01/2025	05/02/2025	65.3	57.5		61	5.5	9	49.6
2	05/02/2025	04/03/2025	50.5	48.9		50	1.1	2	10.2
3	04/03/2025	01/04/2025	54.4	55.6		55	0.8	2	7.6
4	01/04/2025	29/04/2025	40.1	40.3		40	0.1	0	1.3
5	29/04/2025	04/06/2025	41.0	38.3		40	1.9	5	17.2
6	04/06/2025	01/07/2025	56.3	56.0		56	0.2	0	1.9
7	01/07/2025	06/08/2025	50.2	48.6		49	1.1	2	10.2
8	06/08/2025	04/09/2025	35.0	42.7		39	5.4	14	48.9
9	04/09/2025	01/10/2025	57.7	46.1		52	8.2	16	73.7
10	01/10/2025	04/11/2025	46.3	49.1		48	2.0	4	17.8
11	04/11/2025	02/12/2025	56.7	50.4		54	4.5	8	40.0
12	02/12/2025	07/01/2026	51.4	42.3		47	6.4	14	57.8
13									

It is necessary to have results for at least two tubes in order to calculate the precision of the measurements

Automatic Method		Data Quality Check	
Period Mean	Data Capture (% DC)	Tubes Precision Check	Automatic Monitor Data
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
Overall survey -->		Good precision	

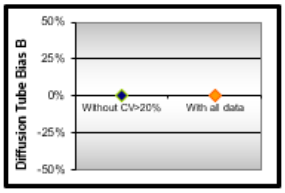
(Check average CV & DC from Accuracy calculations)

Site Name/ ID: Norwich Road

Precision 12 out of 12 periods have a CV smaller than 20%

Accuracy (with 95% confidence interval) without periods with CV larger than 20%
Bias calculated using 0 periods of data
Bias factor A
Bias B
Diffusion Tubes Mean: µgm^{-3}
Mean CV (Precision):
Automatic Mean: µgm^{-3}
Data Capture for periods used:
Adjusted Tubes Mean: µgm^{-3}

Accuracy (with 95% confidence interval) WITH ALL DATA
Bias calculated using 0 periods of data
Bias factor A
Bias B
Diffusion Tubes Mean: µgm^{-3}
Mean CV (Precision):
Automatic Mean: µgm^{-3}
Data Capture for periods used:
Adjusted Tubes Mean: µgm^{-3}



Jaume Targa, for AEA
Version 04 - February 2011

d) St. Helens Street (Site ID: 80, 81 & 82)

Checking Precision and Accuracy of Triplicate Tubes

AEA Energy & Environment
From the AEA group

Diffusion Tubes Measurements

Period	Start Date dd/mm/yyyy	End Date dd/mm/yyyy	Tube 1 µgm^{-3}	Tube 2 µgm^{-3}	Tube 3 µgm^{-3}	Triplicate Mean	Standard Deviation	Coefficient of Variation (CV)	95% CI of mean
1	08/01/2025	05/02/2025	32.5	47.3	48.3	43	8.8	21	22.0
2	05/02/2025	04/03/2025	37.0	32.9	39.9	37	3.5	10	8.7
3	04/03/2025	01/04/2025	39.3	37.8	40.6	39	1.4	4	3.5
4	01/04/2025	29/04/2025	30.9	24.2	28.6	28	3.4	12	8.5
5	29/04/2025	04/06/2025	24.3	21.8	24.4	24	1.5	6	3.7
6	04/06/2025	01/07/2025	36.2	34.4	38.1	36	1.9	5	4.6
7	01/07/2025	06/08/2025	31.1	29.4	31.9	31	1.3	4	3.2
8	06/08/2025	04/09/2025	24.7	27.6	27.5	27	1.6	6	4.1
9	04/09/2025	01/10/2025	33.9	32.4	33.7	33	0.8	2	2.0
10	01/10/2025	05/11/2025	31.1	33.1	29.3	31	1.9	6	4.7
11	05/11/2025	02/12/2025	36.7	39.6		38	2.1	5	18.4
12	02/12/2025	07/01/2026	35.2	32.7	33.4	34	1.3	4	3.2
13									

It is necessary to have results for at least two tubes in order to calculate the precision of the measurements

Automatic Method		Data Quality Check	
Period Mean	Data Capture (% DC)	Tubes Precision Check	Automatic Monitor Data
		Poor Precision	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
Overall survey -->		Good precision	

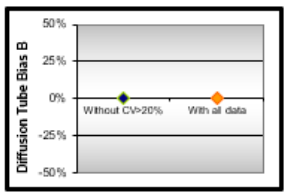
(Check average CV & DC from Accuracy calculations)

Site Name/ ID: St Helens Street

Precision 11 out of 12 periods have a CV smaller than 20%

Accuracy (with 95% confidence interval) without periods with CV larger than 20%
Bias calculated using 0 periods of data
Bias factor A
Bias B
Diffusion Tubes Mean: µgm^{-3}
Mean CV (Precision):
Automatic Mean: µgm^{-3}
Data Capture for periods used:
Adjusted Tubes Mean: µgm^{-3}

Accuracy (with 95% confidence interval) WITH ALL DATA
Bias calculated using 0 periods of data
Bias factor A
Bias B
Diffusion Tubes Mean: µgm^{-3}
Mean CV (Precision):
Automatic Mean: µgm^{-3}
Data Capture for periods used:
Adjusted Tubes Mean: µgm^{-3}



Jaume Targa, for AEA
Version 04 - February 2011

f) St. Matthews Street (Site ID: 99, 100 & 101 co-located with IPS04)

Checking Precision and Accuracy of Triplicate Tubes

AEA Energy & Environment
From the AEA group

Diffusion Tubes Measurements

Period	Start Date dd/mm/yyyy	End Date dd/mm/yyyy	Tube 1 µgm^{-3}	Tube 2 µgm^{-3}	Tube 3 µgm^{-3}	Triplicate Mean	Standard Deviation	Coefficient of Variation (CV)	95% CI of mean
1	08/01/2025	05/02/2025	38.5	38.2	38.6	38	0.2	1	0.5
2	05/02/2025	04/03/2025	36.2	42.1	41.7	40	3.3	8	8.2
3	04/03/2025	01/04/2025	43.1	48.5	45.8	46	2.7	6	6.7
4	01/04/2025	29/04/2025	34.6	38.1	36.9	37	1.8	5	4.4
5	29/04/2025	04/06/2025	27.7	27.9	30.9	29	1.8	6	4.5
6	04/06/2025	01/07/2025	35.2	31.5	35.0	34	2.1	6	5.2
7	01/07/2025	06/08/2025	28.5	29.5	22.9	27	3.6	13	8.8
8	06/08/2025	04/09/2025	23.6	29.7	29.1	27	3.4	12	8.4
9	04/09/2025	01/10/2025	31.8	32.2	30.1	31	1.1	4	2.8
10	01/10/2025	04/11/2025	28.8	26.1		27	1.9	7	17.2
11	04/11/2025	02/12/2025	40.9	40.8	41.8	41	0.6	1	1.4
12	02/12/2025	07/01/2026			42.6				
13									

It is necessary to have results for at least two tubes in order to calculate the precision of the measurements

Automatic Method		Data Quality Check	
Period Mean	Data Capture (% DC)	Tubes Precision Check	Automatic Monitor Data
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
		Good	
Overall survey -->		Good precision	

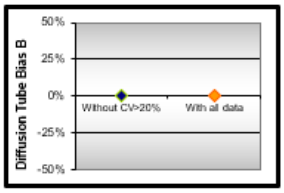
(Check average CV & DC from Accuracy calculations)

Site Name/ ID: St Matthews Street

Precision: 11 out of 11 periods have a CV smaller than 20%

Accuracy (with 95% confidence interval) without periods with CV larger than 20%
Bias calculated using 0 periods of data
Bias factor A
Bias B
Diffusion Tubes Mean: µgm^{-3}
Mean CV (Precision):
Automatic Mean: µgm^{-3}
Data Capture for periods used:
Adjusted Tubes Mean: µgm^{-3}

Accuracy (with 95% confidence interval) WITH ALL DATA
Bias calculated using 0 periods of data
Bias factor A
Bias B
Diffusion Tubes Mean: µgm^{-3}
Mean CV (Precision):
Automatic Mean: µgm^{-3}
Data Capture for periods used:
Adjusted Tubes Mean: µgm^{-3}



Jaume Targa, for AEA
Version 04 - February 2011

Diffusion Tube Annualisation

All diffusion tube monitoring locations within Ipswich Borough 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 2026 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.

Ipswich Borough Council have applied a national bias adjustment factor of 0.78 to the 2025 monitoring data. A summary of bias adjustment factors used by Ipswich Borough Council over the past five years is presented in Table C.1.

The decision to apply the national bias adjustment factor gave consideration to the guidance in Box 7.13 of LAQM.TG22. The reason for the decision was due to:

- In 2021, the Council have used a combined local bias correction factor because of a high data capture rate from our continuous analyser at St Matthews Street and our former analyser on Chevallier Street. However, due to the exceptional temperatures experienced in the summer of 2022, data between June and September had to be rejected from our analyser on Chevallier Street as the monitor could not be cooled sufficiently despite the procurement of a new air conditioning unit. Furthermore, the same monitor experienced faults in both May – June and December 2023. As a result of these issues, we had less than 75% data capture for the Chevallier Street site and were unable to calculate a combined local bias correction factor for 2022 and 2023. In 2024, despite a data capture rate of over 75% at the Chevallier Street monitor, we had equipment faults and poor data capture for January, August and December. As a result of the poor data capture again at this monitor (<90%) in 2024, it was decided to apply the national bias adjustment factor for the third year running. It was felt that this was a more conservative approach, thereby giving greater confidence in the data presented. Due to the ongoing faults at the Chevallier Street analyser, the Council decommissioned the unit in January 2024 as it had become uneconomical to repair.
- The Council calculated a local bias correction factor from our St Matthews Street analyser (99% data capture), and this was recorded as 0.75 – see Table C.3 below for the calculation of the local bias correction factor. As the local bias correction factor was lower than the nationally derived bias correction factor (0.78), it was decided to apply the national correction factor to the data this year to give robust, conservative results.

To assist with providing transparency to the reader, an example of the national bias correction factor being applied to a diffusion tube is shown below.

Example of applying the national bias correction factor to diffusion tube data:

Diffusion tube 34 (College Street) – annual mean 30.3µg/m3 (average from 12 months of monthly diffusion tube readings). 27.7µg/m3 x 0.78 = 21.6µg/m3

Table C.1 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2025	National	03/26 – 17 Studies	0.78
2024	National	04/25 – 33 studies	0.78
2023	National	03/24 – 28 studies	0.77
2022	National	03/23 – 26 studies	0.76
2021	Local	-	0.78

Table C.2 – Local Bias Adjustment Calculation

	Local Bias Adjustment Input 1	Local Bias Adjustment Input 2	Local Bias Adjustment Input 3	Local Bias Adjustment Input 4	Local Bias Adjustment Input 5
Periods used to calculate bias	11				
Bias Factor A	0.75 (0.69 – 0.81)				
Bias Factor B	34% (23%-45%)				
Diffusion Tube Mean (µg/m^3)	34.4				
Mean CV (Precision)	6.3%				
Automatic Mean (µg/m^3)	25.6				
Data Capture	99%				
Adjusted Tube Mean (µg/m^3)	26 (24 – 28)				

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.

Distance correction should be considered at any monitoring site where the annual mean concentration is greater than 36µg/m3 and the monitoring site is not located at a point of relevant exposure. Once corrected for bias, the only monitoring sites that required distance correction due to being greater than 36µg/m3 and not located at a point of relevant exposure were sites 64&65 (duplicate). The corrections were undertaken using

the Diffusion Tube Data Processing Tool available on the Defra LAQM Support website. The outputs from the Diffusion Tube Data Processing Tool are presented in Table C.4.

Table C.3 – Non-Automatic NO_2 Fall off With Distance Calculations (concentrations presented in µg/m^3)

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted	Background Concentration	Concentration Predicted at Receptor	Comments
64, 65	1.3	1.7	38.4	9.8	36.9	

QA/QC of Automatic Monitoring

The automatic NO_2 monitor located on St Matthews Street (IPS04) is subject to a fortnightly routine calibration by an Ipswich Borough Council Environmental Health Officer or Technical Officer. The automatic PM analyser located on St Helens Street is a FIDAS unit and not subject to Local Site Operator (LSO) calibrations.

The analysers are also serviced and the monitoring sites audited biannually by ET Enviro Technology Services Ltd and Ricardo Energy & Environment respectively. Copies of the Certificate of Calibration issued following the most recent site audit (January 2026) are displayed below (Figures C.2 and C.3). All automatic monitoring data collected at the St Matthews Street and St Helens Street sites are managed by Ricardo Energy & Environment using the same quality control procedures utilised by Defra's national air quality network stations. These procedures represent best practice and fully meet the requirements set out in LAQM.TG(22). Ricardo Energy & Environment currently provide UKAS accredited quality control audits and data management services to all Defra national network (AURN) air quality monitoring stations.

All collected data is screened and scaled (based on site calibrations) and the final data sets presented within this report (Figures C.4 and C.5) have benefitted from a full process of data ratification, including thorough additional data quality checks that include site audits and a ratification process that corrects data for instrument sensitivity drift between routine calibrations.

Live and historic data is available via: Ipswich Borough Council - Air Quality monitoring service

Figure C.2 – Certificate of Calibration for IPS04

CERTIFICATE OF CALIBRATION

Ricardo, Gemini Building,
Fermi Avenue Harwell, Didcot, Oxfordshire OX11 0QR.
Telephone: 01235 753000

Member of WSP

Page 1 of 3

Approved Signatories:

☐ S. Copsey	☐ S. Stratton
☑ N. Rand	☐ S. Telfer
☐ B. Davies	☐ S. Gray
☐ D. Lane	☐ F. Elmer
☐ A. Nash	

Signed:

Date of Issue: 06 Jan 2026

Certificate Number: 07835

Customer Name and Address:
Ipswich Borough Council
Grafton House
15-17 Russell Road
Ipswich
IP1 2DE

Description: Calibration results for the air monitoring station at Ipswich St Matthews Street

Ricardo Energy & Environment ID: ED79001143/December 2025

The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor k=2 providing a level of confidence of approximately 95% The uncertainty evaluation has been carried out in accordance with UKAS requirements.

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

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ee.ricardo.com

CERTIFICATE OF CALIBRATION

Date of issue: 06 Jan 2026

Certificate Number: 07835

Ricardo Energy & Environment ID: ED79001143/December 2025

Ipswich St Matthews Street
Date of audit: 08 Dec 2025

Species	Analyser Serial No.	Zero Response[1]	Zero uncertainty (nmol/mol)	Calibration Factor[2]	Factor uncertainty (%)
NOx	2696	1.8	2.6	1.1174	3.5
NO		-0.6	2.6	1.1195	3.5

Ipswich St Matthews Street
Date of audit: 08 Dec 2025

Species	Analyser Serial No.	Converter efficiency at 250 nmol/mol O_3 (%)[3]	Converter uncertainty at 250 nmol/mol O_3 (%)	Converter efficiency at 125 nmol/mol O_3 (%)[3]	Converter uncertainty at 125 nmol/mol O_3 (%)
NOx	2696	99.3 (243 nmol/mol)	0.9	98.8 (124 nmol/mol)	0.9
NO					

CERTIFICATE OF CALIBRATION

Date of issue: 06 Jan 2026

Certificate Number: 07835

Ricardo Energy & Environment ID: ED79001143/December 2025

The gaseous ambient analysers listed above have been tested for zero response, calibration factor, linearity, and converter efficiency (NOx analysers) by documented methods. The factors have been calculated using certified gas standards. The zero calibration is achieved using a traceable cylinder of zero air. The air from the cylinder contains no water vapour and this change in humidity from ambient air may well affect the response characteristics of certain analysers when compared to a zero calibration performed using chemical scrubbers. The traveling standard photometer used to test the O_3 analyser has been calibrated against the primary standard, using the cross-section given in BIPM document CCQM.O3.2019. The particulate analysers listed above have been tested for sample flow rates and k_0 (where appropriate) by documented methods. Note that the test results are valid on the day of test only, as analyser drift over time cannot be quantified. All results for gaseous species are reported in composition units of nmol/mol or µmol/mol.

[1] The zero response is the zero reading on the data logging system of the analyser when audit zero gas was introduced to the analysers under test.

[2] The calibration factor is the multiplying factor required to scale the reading on the data logging system of the analyser into reported concentration units (nmol/mol for NO, NOx, SO_2, O_3 and µmol/mol for CO). It should be used in conjunction with the zero response. A corrected concentration is calculated using the following equation:

Concentration = F(Output - Zero Response)
Where F = Calibration Factor provided on this certificate
Output = Reading on the data logging system of the analyser
Zero Response = Zero Response provided on this certificate

[3] Converter efficiency is the measured efficiency of the NO_2 to NO converter within the oxides of nitrogen analyser under test.

The calibration results shaded are those that fall within our scope of accreditation, all other results on this certificate are not UKAS accredited, but have been included for completeness.

End of certificate.

Figure C.3 – Certificate of Calibration for IPS05

CERTIFICATE OF CALIBRATION

0401

Ricardo, Gemini Building,
Fermi Avenue Harwell, Didcot, Oxfordshire OX11 0QR.
Telephone: 01235 753000

RICARDO
Member of WSP

Approved Signatories:

☐	S. Copsey	☐	S. Stratton
☑	N. Rand	☐	S. Telfer
☐	B. Davies	☐	S. Gray
☐	D. Lane	☐	F. Elmer
☐	A. Nash		

Signed: N. Rand

Date of Issue: 06 Jan 2026

Certificate Number: 07834

Customer Name and Address:
Ipswich Borough Council
Grafton House
15-17 Russell Road
Ipswich
IP1 2DE

Description: Calibration results for the air monitoring station at Ipswich St Helen's

Ricardo Energy & Environment ID: ED79001143/December 2025

The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor k=2 providing a level of confidence of approximately 95% The uncertainty evaluation has been carried out in accordance with UKAS requirements.

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

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VAT Registration No.
GB 212 8365 24

CERTIFICATE OF CALIBRATION

Date of issue: 06 Jan 2026

Certificate Number: 07834

Ricardo Energy & Environment ID: ED79001143/December 2025

Ipswich St Helen's
Date of audit: 08 Dec 2025

Analyser Type	Species	Analyser Serial No.	Parameter	Specified Value	Measured Value	Deviation (%)	Uncertainty (%)
Fidas 200	PM	19006	Total Flow[1]	4.80	4.78	-0.5	2.2
			Zero (µg/m³)[2]	n/a	0.00	n/a	n/a
			Caldust channel deviation[3]	n/a	0.67	n/a	n/a

CERTIFICATE OF CALIBRATION

Date of issue: 06 Jan 2026

Certificate Number: 07834

Ricardo Energy & Environment ID: ED79001143/December 2025

The gaseous ambient analysers listed above have been tested for zero response, calibration factor, linearity, and converter efficiency (NO_x analysers) by documented methods. The factors have been calculated using certified gas standards. The zero calibration is achieved using a traceable cylinder of zero air. The air from the cylinder contains no water vapour and this change in humidity from ambient air may well affect the response characteristics of certain analysers when compared to a zero calibration performed using chemical scrubbers. The traveling standard photometer used to test the O_3 analyser has been calibrated against the primary standard, using the cross-section given in BIPM document CCQM.O3.2019. The particulate analysers listed above have been tested for sample flow rates and k_0 (where appropriate) by documented methods. Note that the test results are valid on the day of test only, as analyser drift over time cannot be quantified. All results for gaseous species are reported in composition units of nmol/mol or µmol/mol.

[1] The measured main flow rate (where this is applicable) is the flow rate through the sensor unit of the TEOM particulate analyser under test. The measured aux flow rate (where this is applicable) is the flow rate through the bypass tubing of the TEOM particulate analyser under test. The measured total flow rate is the total flow rate through the particulate analyser under test. Units of flow are l/min^{-1}, reported at prevailing ambient conditions unless otherwise specified. Where flow rates are highlighted in bold, it indicates that measurements were not made at the analyser sample inlet. These measurements therefore may not accurately reflect analyser performance in normal operation.

[2] The zero response (specifically for Fidas analysers) is the stable mass concentration reported by the analyser when a HEPA filter is placed on the sample inlet.

[3] The caldust channel deviation (specifically for Fidas analysers) is the response of the analyser to calibration dust of a known particle size. For the analyser to pass this test, the deviation result must be less than ±1.5 channels.

The calibration results shaded are those that fall within our scope of accreditation, all other results on this certificate are not UKAS accredited, but have been included for completeness.

End of certificate.

Figure C.4 – 2025 Air Pollution Report – St Matthews Street (Site ID: IPS04)

Air Pollution Report

1st January to 31st December 2025

Air Quality England

Ipswich St Matthews Street (Site ID: IPS04)

These data have been fully ratified
Only relevant statistics for LAQM are presented in the table. Cells with - indicate no data available or calculated.

Pollutant	NO µg/m³	NO_2 µg/m³	NO_x as NO_2 µg/m³
Number Days Low	-	365	-
Number Days Moderate	-	0	-
Number Days High	-	0	-
Number Days Very High	-	0	-
Max Daily Mean	84	58	184
Annual Max	310	119	546
Annual Mean	20	25	57
99.8th Percentile of hourly mean	-	87	-
98th Percentile of hourly mean	86	66	194
95th Percentile of hourly mean	62	55	147
50th Percentile of hourly mean	15	23	46
% Annual data capture	**99.12**	**99.12**	**99.12**

All gaseous pollutant mass units are at 20°C and 1013mb. Particulate matter concentrations are reported at ambient temperature and pressure. NO_x mass units are NO_x as NO_2 µg m-3

Pollutant	Air Quality Standards regulations 2010	Exceedances	Days
Nitrogen dioxide	Hourly Mean > 200 microgrammes per metre cubed	0	0
Nitrogen dioxide	**Annual Mean > 40 microgrammes per metre cubed**	**0**	-

Annual Graph

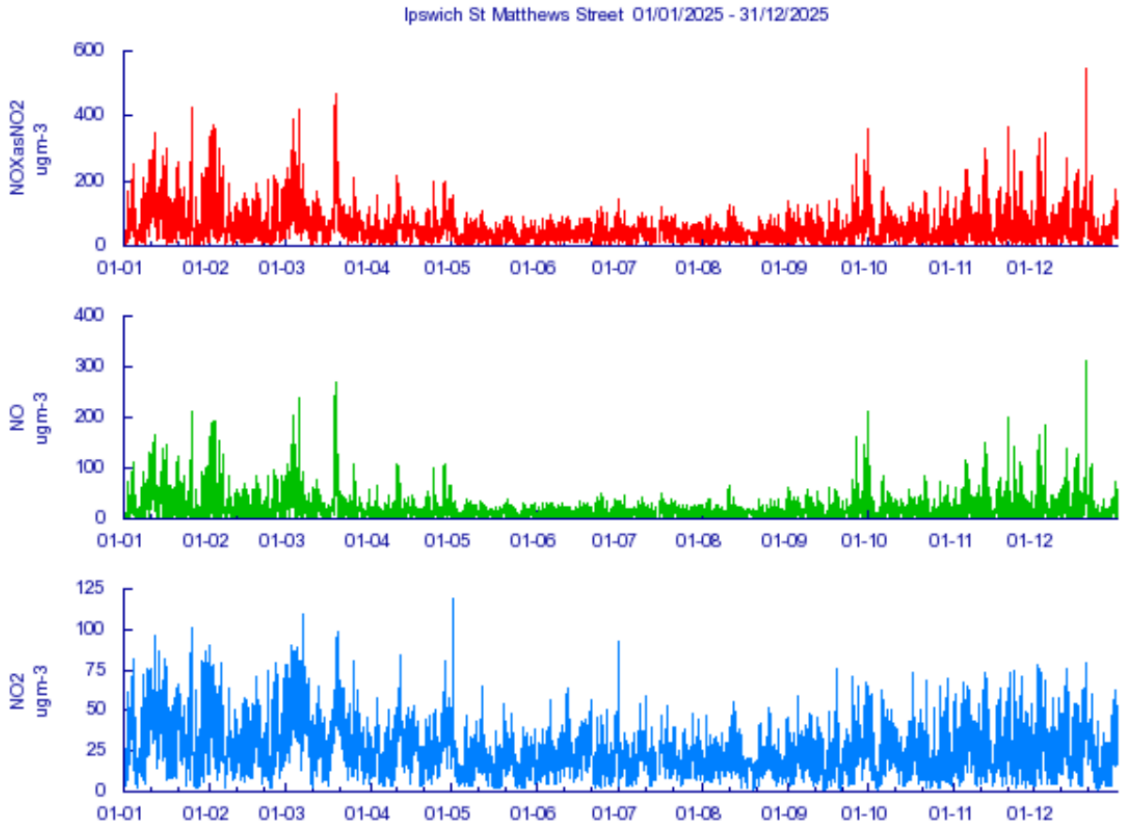


Figure C.5 – 2025 Air Pollution Report – St Helens Street (Site ID: IPS05)

Air Pollution Report

1st January to 31st December 2025

Air Quality England

Ipswich St Helens Street (Site ID: IPS06)

These data have been fully ratified
Only relevant statistics for LAQM are presented in the table. Cells with - indicate no data available or calculated.

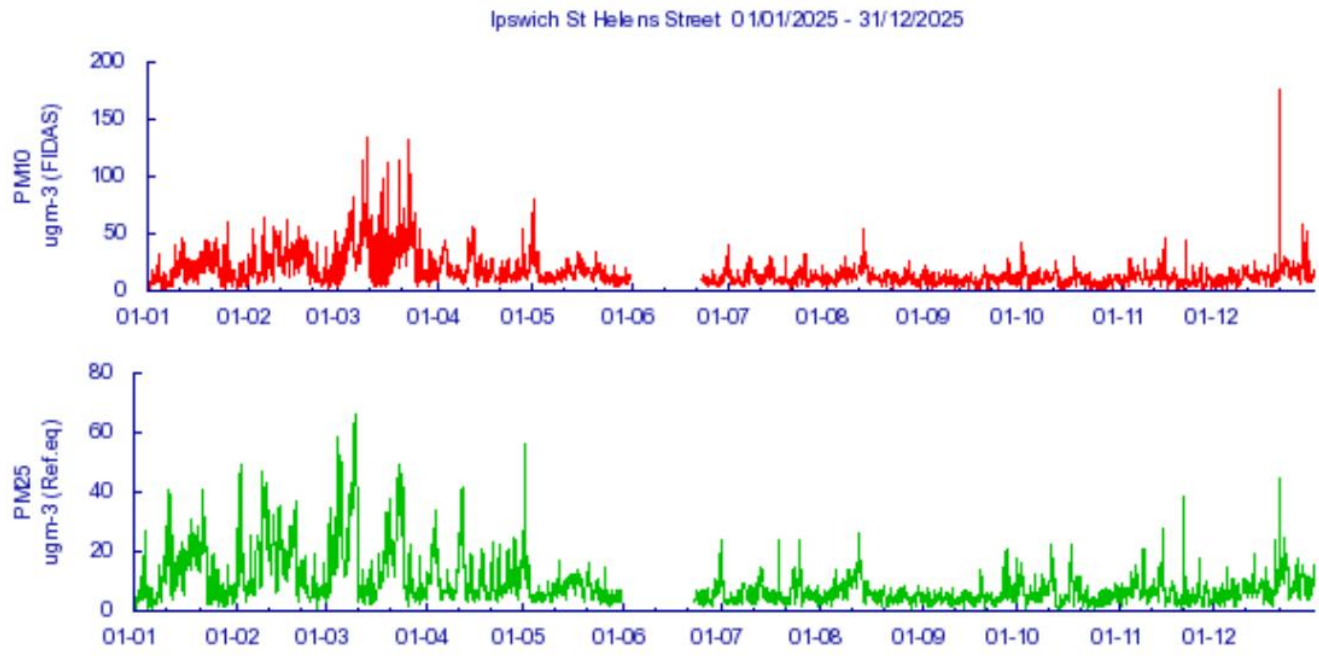
Pollutant	PM_{10} µg/m³	PM_{25} µg/m³
Number Days Low	337	339
Number Days Moderate	5	2
Number Days High	0	1
Number Days Very High	0	0
Max Daily Mean	74	55
Annual Max	176	66
Annual Mean	15	9
98th Percentile of daily mean	42	-
90th Percentile of daily mean	27	-
98th Percentile of hourly mean	49	35
95th Percentile of hourly mean	39	25
50th Percentile of hourly mean	12	6
% Annual data capture	**93.71**	**93.71**

Instruments:
PM_{10}: FIDAS (01/01/2025 to 31/12/2025)
PM_{25}: FIDAS (01/01/2025 to 31/12/2025)

All gaseous pollutant mass units are at 20°C and 1013mb. Particulate matter concentrations are reported at ambient temperature and pressure. NO_X mass units are NO_X as NO_2 µg m-3

Pollutant	Air Quality Standards regulations 2010	Exceedances	Days
PM_{10} particulate matter (Hourly measured)	daily mean > 50 microgrammes per metre cubed	5	5
PM_{10} particulate matter (Hourly measured)	Annual mean > 40 microgrammes per metre cubed	0	-
$PM_{2.5}$ particulate matter (Hourly measured)	**Annual mean > 25 microgrammes per metre cubed**	**0**	**-**

Annual Graph



PM_{10} and $PM_{2.5}$ Monitoring Adjustment

The FIDAS monitor located on St Helens Street is independently audited by Ricardo, with the latest Certificate of Calibration issued following the most recent site audit shown in figure C.3 above. Ricardo carry out the data checking, processing and validation in line with standard requirements on behalf of Ipswich Borough Council. This includes regular checks to make sure the monitor is running, and data is being downloaded and raising any issues with the supplier when identified to resolve and manual review of the data to exclude any data due to instrument malfunctions or faulty calibrations.

In line with guidance in LAQM.TG (22), the FIDAS instrument processes the PM10 and $PM_{2.5}$ data using an inbuilt algorithm. This algorithm known as Method 11 has been certified in the UK. The Method 11 PM10 data can be used by Local Authorities without the need for correction for slope and/or intercept but the Method 11 $PM_{2.5}$ data needs correction for slope by dividing by 1.06. Therefore, the FIDAS $PM_{2.5}$ data provided in the report have been scaled accordingly.

Automatic Monitoring Annualisation

All automatic monitoring locations within Ipswich recorded data capture of greater than 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.

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 NO_2 fall-off with distance calculator available on the LAQM Support website. Where appropriate, automatic annual mean NO_2 concentrations corrected for distance are presented in Table A.3.

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

Figure D.6 – Overview of Ipswich AQMA boundaries and monitoring locations

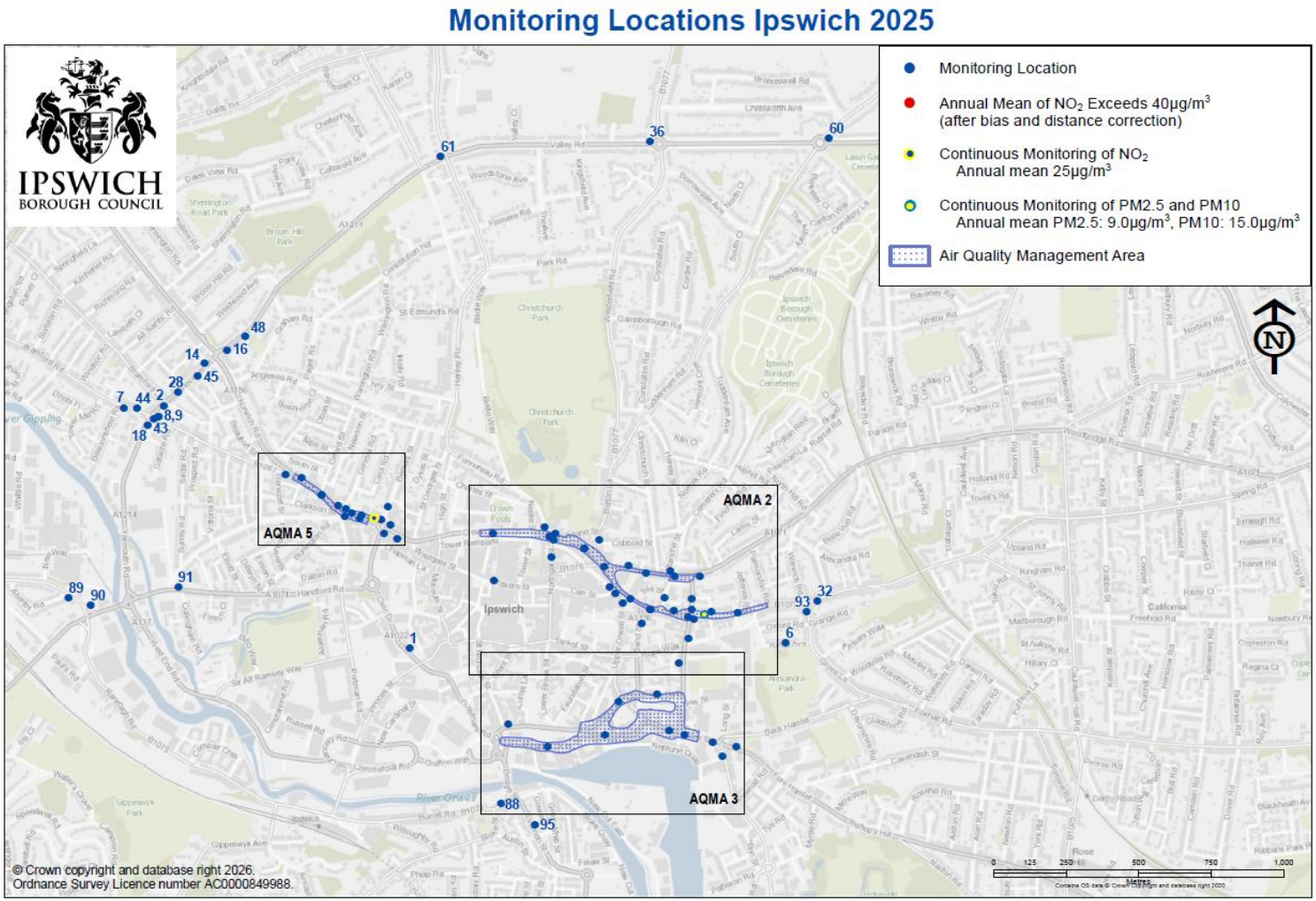


Figure D.2 – Ipswich Air Quality Management Area 2

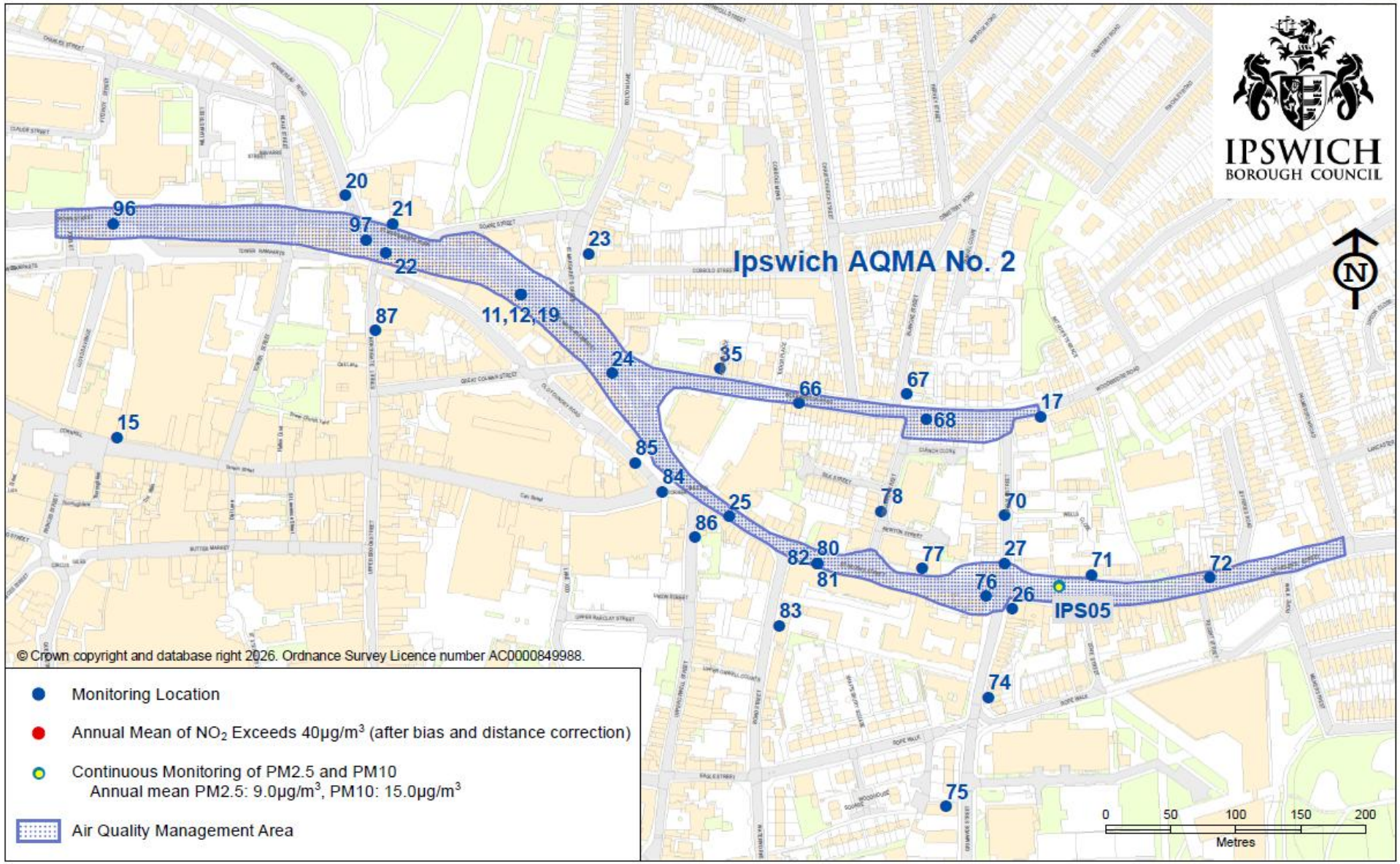


Figure D.3 – Ipswich Air Quality Management Area 3

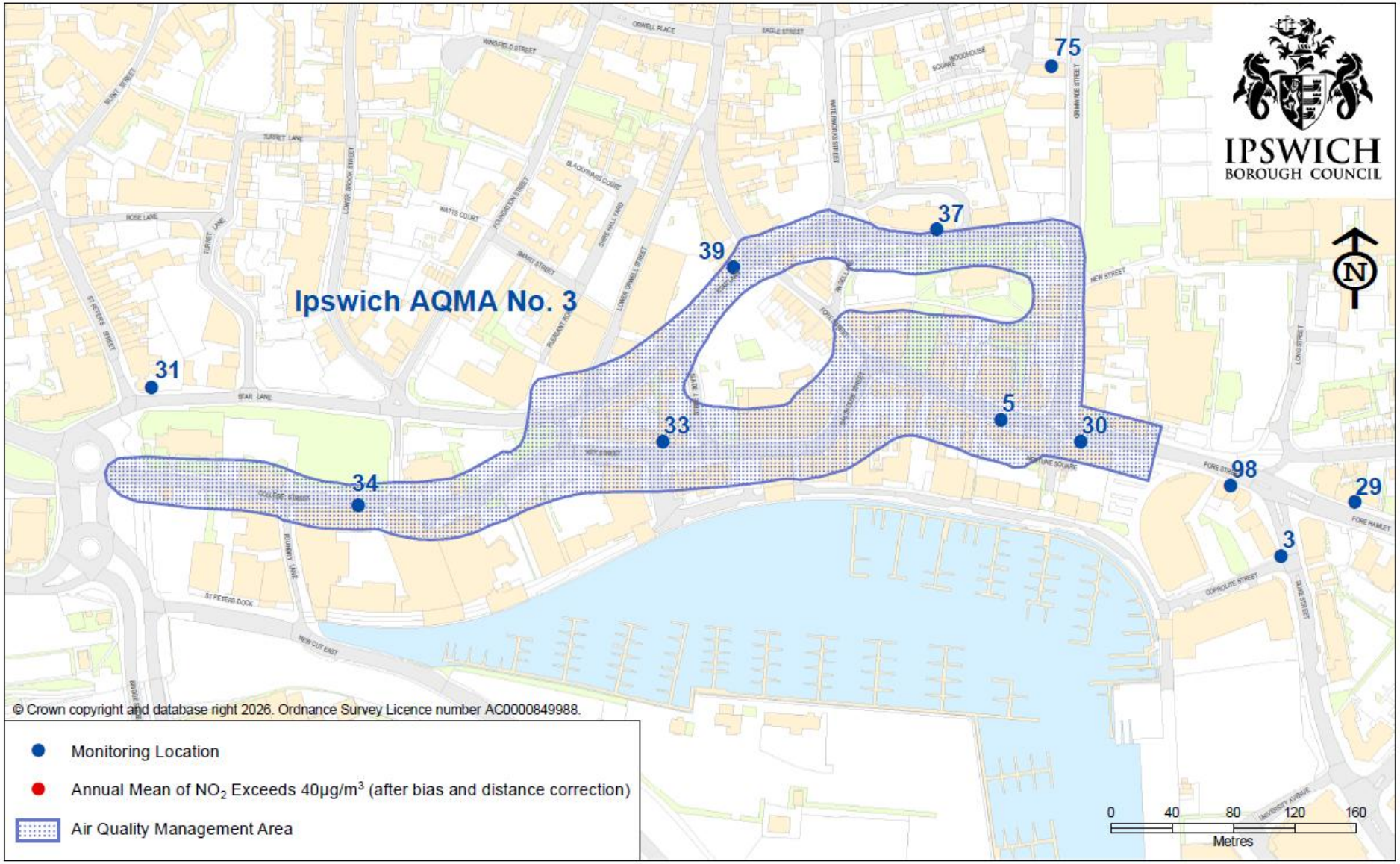
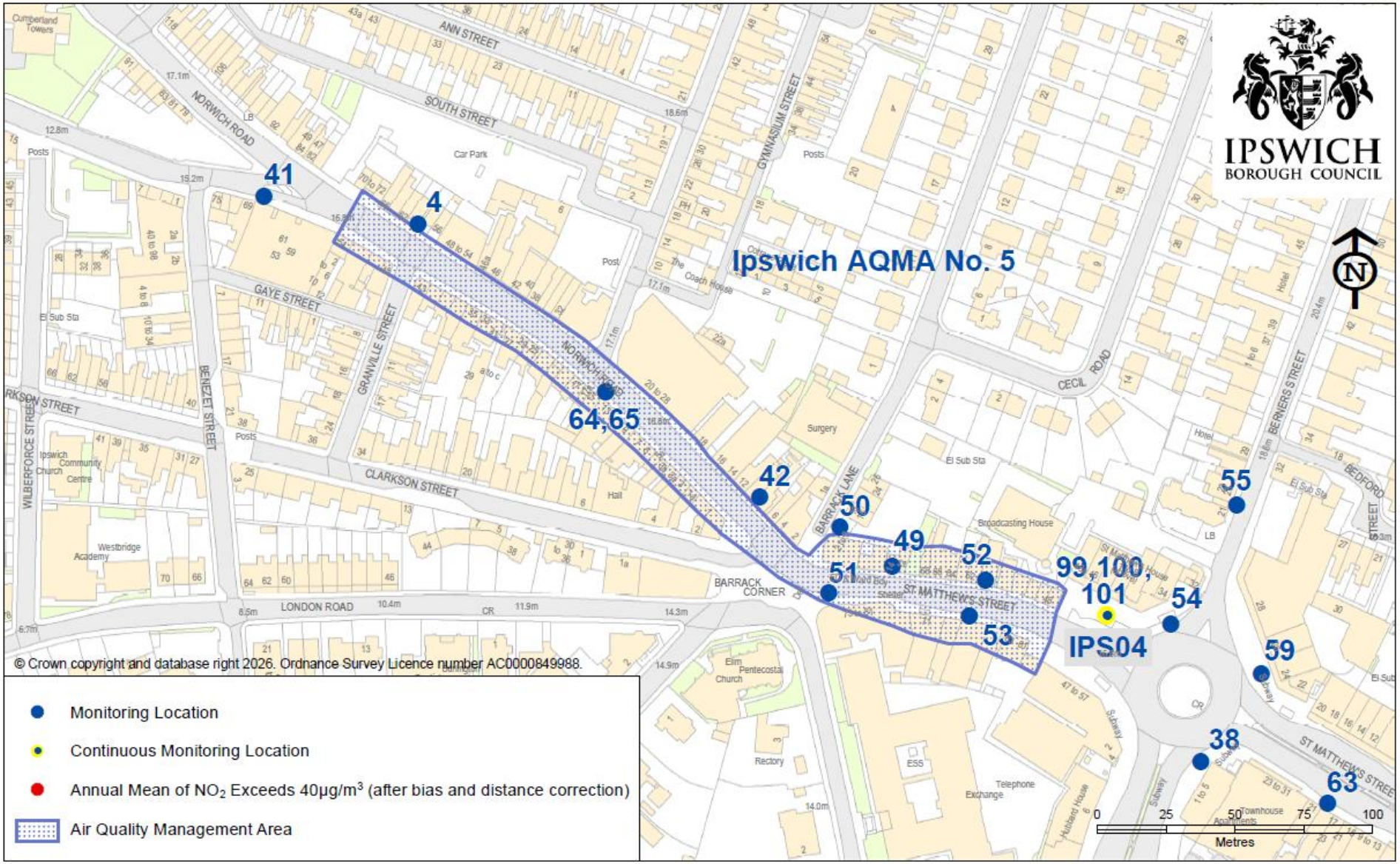


Figure D.4 – Ipswich Air Quality Management Area 5



Appendix E: Detailed Assessment of AQMA 3

IPSWICH
BOROUGH COUNCIL

Detailed Assessment of Air Quality for Ipswich Borough Council

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

March, 2026

Local Authority Officer	Andrew Coleman
Department	Environmental Protection
Address	Grafton House, 15-17 Russell Road, Ipswich, IP1 2DE
Telephone	01473 432000
Email	environmental.health@ipswich.gov.uk
Report Reference Number	AJC/DA/26
Date	March 2026

Executive Summary

Part IV of the Environment Act 1995 placed a requirement on local authorities to periodically review and assess air quality in their districts. This involves identifying those areas where it is considered likely that the Air Quality Objectives will be exceeded. Local authorities have a duty to designate any such locations as Air Quality Management Areas (AQMAs) and pursue improvements in air quality in those areas.

Ipswich currently has 3 AQMA's. This report is written in recognition that the boundaries of the existing AQMAs need reviewing on a regular basis to ensure they remain relevant.

This report has been prepared in accordance with Local Air Quality Management Guidance Note LAQM.TG (22).

Monitoring data indicates that there have been no measured exceedances of the air quality objective for NO_2 concentrations over the last three years in AQMA 3.

In light of this, the detailed assessment recommends the following:

- AQMA No. 3 is revoked.

Ipswich Borough Council will now consult with DEFRA and other statutory consultees, members, Suffolk County Council and members of the public regarding this decision.

Monitoring results in AQMA No 2. and AQMA No 5. still indicate NO_2 concentrations within 10% of the air quality objective, and as such, no plans are being made to amend the boundary of these AQMAs.

Monitoring of nitrogen dioxide will continue at a number of locations within the Ipswich borough using both continuous monitoring and diffusion tubes. This will ensure that the AQMAs remain relevant, will identify other areas of poor air quality, and will, over time, give an indication of any improvement in air quality as the actions within the Air Quality Action plan are implemented.

Table of Contents

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Background to Local Air Quality Management in Ipswich

Ipswich Borough Council has completed eight rounds of Review and Assessment since 2000 and publishes Annual Status Reports in accordance with the Local Air Quality Management (LAQM) regime.

Five Air Quality Management Areas (AQMAs) have been declared in Ipswich since 2006 due to exceedances of the annual mean Nitrogen Dioxide (NO_2) objective, all primarily associated with road traffic emissions. Over time, several of these have been amended or revoked as air quality has improved.

Currently, Ipswich Borough Council has declared a total of three AQMAs, all due to continued exceedance of the annual mean NO_2 objective level. These are:

- Ipswich AQMA No. 2 - From the junction with Peel Street, extending along Crown Street, St Margarets Street and St Helens Street to the junction with Palmerston Road, and from St Margarets Street extending up Woodbridge Road to just beyond the junction with Argyle Street. (declared 2006; amended 2017);
- Ipswich AQMA No. 3 - Encompassing the land in and around College Street, Key Street, Salthouse Street, Fore Street, Star Lane, Neptune Square and Grimwade Street (declared 2006; amended 2017; amended 2021);
- Ipswich AQMA No. 5 - Incorporating the land in or around St. Matthews Street / Norwich Road between the Civic Drive roundabout and Bramford Road (declared 2017).

Figure 1 below shows the current Air Quality Management Areas in Ipswich.

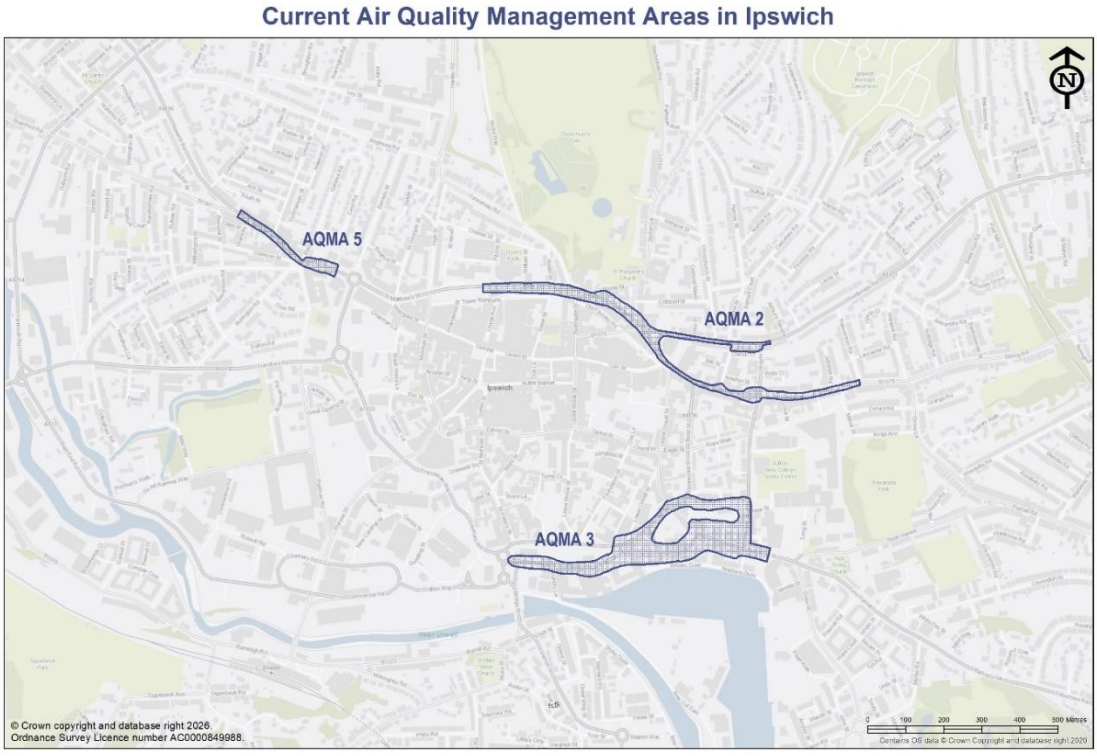

Figure 1: Current Air Quality Management Areas in Ipswich

In 2025, the Council published its latest Air Quality Action Plan aimed at addressing the exceedances of the NO_2 annual mean objective level.

Focus on AQMA No. 3

AQMA No.3 was originally declared in 2006 due to exceedances of the annual mean NO_2 objective within the Star Lane gyratory and adjoining streets. Boundary amendments were made in 2017 and again in 2021 following updated monitoring data.

The latest 2025 monitoring data indicates that there have been no measured concentrations within 10% of the air quality objective for NO_2 concentrations over the last three years (2023 – 2025) in AQMA No.3. In light of this, the Council is now reviewing the monitoring data to determine whether the existing AQMA is still appropriate and whether it can be revoked.

A copy of the Councils air quality reports, detailed assessments, and AQMA orders can be found at: Air Quality Management | ipswich.gov.uk

Detailed Assessment of NO_2 Monitoring in Ipswich

Overview of Monitoring

DEFRA's LAQM Helpdesk has previously confirmed that dispersion modelling is not essential for the purposes of a Detailed Assessment. Paragraph 3.55 of LAQM.TG(22) supports this and states "*in some instances if compelling evidence exists, detailed modelling to support the decision to amend/revoke an AQMA may not be necessary and an AQMA may be amended or revoked following a screening assessment or on the basis of robust monitoring evidence*."

The Council currently monitors NO_2 levels using 93 diffusion tubes positioned at 83 locations in and around the perimeter of the AQMAs, at background locations, or at locations where it is suspected that concentrations may be close to the annual objective level. In addition, the Council operates one continuous monitor that measure concentrations of nitrogen dioxide. This is located just outside the periphery of AQMA No.5 on St Matthews Street. A second continuous monitor previously operated on Chevallier Street, located within the former AQMA No 1, but it was decommissioned in January 2024 after becoming uneconomical to repair.

Monitoring results in AQMA No 2 and AQMA No 5. still indicate NO_2 concentrations within 10% of the air quality objective at various locations, and as such, no plans are being made to amend the boundaries of these AQMAs. In light of this, the focus of this detailed assessment is on AQMA No.3.

This detailed assessment is based on diffusion tube readings placed out in and around the perimeter of AQMAs No.3 over the last seven years.

In accordance with the current LAQM regime in the UK, a copy of this assessment will be appended to the Councils next Annual Status Report.

Diffusion Tube Analysis

Triplicate tubes reviewed in this assessment have been suitably checked for precision and accuracy and were found to have good precision overall. All diffusion tubes reviewed in the assessment had a high data capture rate (above 75%).

All diffusion tube results have been suitably corrected for bias. A locally derived bias correction factor was applied to results from 2019–2021. Due to issues with the Chevallier Street analyser, a national bias correction factor was used for the 2022–2024 data. Although the continuous monitor at St Matthew Street achieved a high data capture rate in 2025 (>75%), the national bias correction factor (0.78) was applied to the 2025 diffusion tube results instead of the locally derived factor (0.75), as it provided a more conservative assessment.

Paragraph 1.73 of LAQM.TG(22) states that likely exceedances of the objectives should be assessed in relation to 'the quality of the air at locations which are situated outside of buildings or other man-made structures, above or below ground, and where members of the public are likely to be regularly present'. Building facades of residential properties, schools, hospitals and care homes would all be relevant in terms of long-term annual mean objectives.

Where diffusion tube locations were not representative of annual mean exposure to relevant receptors, the data was distance corrected, where possible, using the Defra Nitrogen Dioxide fall off with distance calculator to estimate the annual mean NO_2 concentration at the façade of the closest property.

Automatic Monitoring

The automatic monitor data used in co-location studies were subject to fortnightly routine calibration by an Ipswich Borough Council Environmental Health Officer or Technical Officer. The analysers were also serviced and the monitoring site audited biannually by an Equipment Support Unit and Ricardo Energy & Environment respectively.

All automatic monitoring data collected is managed by Ricardo Energy & Environment using the same quality control procedures utilised by Defra's national air quality network stations. These procedures represent best practice and fully meet the requirements set out in LAQM.TG(22).

All collected data is screened and scaled (based on site calibrations) and the final data sets presented within this report have benefitted from a full process of data ratification, including thorough additional data quality checks that include site audits and a ratification process that corrects data for instrument sensitivity drift between routine calibrations.

Further details on the QA/QC for the air quality monitoring data can be found in the ASR's, Updating and Screening Assessments and Progress Reports on the Councils website.

Monitoring Data

The map and table below show the monitoring locations and annual mean NO_2 concentrations within AQMA No. 3 for the period 2019 – 2025. *Monitoring at DT98 commenced in 2021 following amending the boundary to this AQMA.

AQMA No.3

A map detailing the monitoring locations in and around the perimeter of AQMA 3 is shown below:

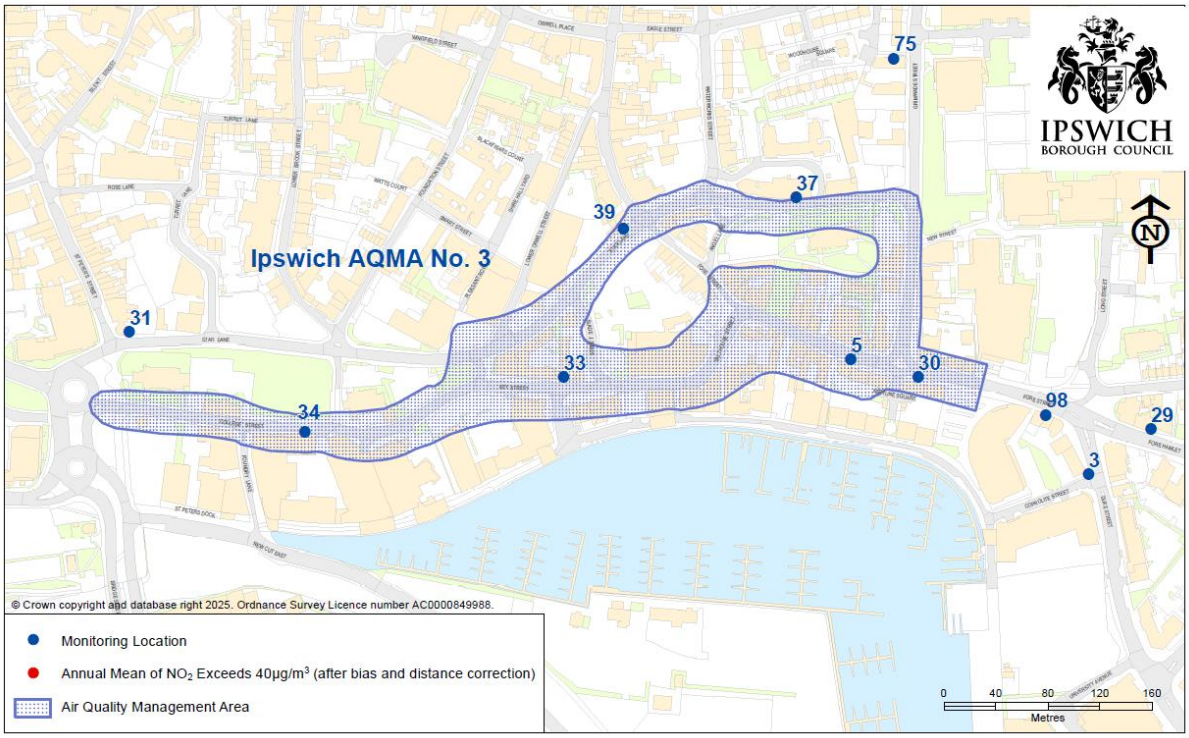

Figure 2: Monitoring Locations in and around AQMA 3

Table 3: Values of NO2 at façade for monitoring sites near AQMA 3

Monitoring site	In AQMA	Distance correction required	NO_2 Concentrations (µg/m^3) (unadjusted values not located at façade of relevant receptor provided in brackets)						
			2019 - LF	2020 - LF	2021 - LF	2022 - NF	2023 - NF	2024 - NF	2025 - NF
DT3	N	N/A – as no nearby receptor	(26.1)	(19.5)	(20.9)	(22.0)	(20.3)	(17.0)	(17.3)
DT5	Y	Y	37.7 (39.0)	31.1 (32.1)	32.9 (33.3)	32.3 (33.4)	30.0 (31.2)	27.5 (28.6)	27.0 (28.1)
DT29	N	N	30.9	24.1	27.6	26.9	25.1	23.7	22.6
DT30	Y	Y	**43.0** **(45.9)**	32.8 (34.7)	35.2 (37.5)	37.1 (39.6)	33.1 (35.2)	32.5 (34.9)	30.3 (32.6)
DT31	N	N/A – as no nearby receptor	**(43.7)**	33.9	38.6	38.3	34.4	31.1	27.7
DT33	Y	N	32.1	23.5	27.7	27.7	24.6	22.8	23.8
DT34	Y	N/A – as no nearby receptor	(32.9)	25.0	27.7	28.4	24.9	23.6	21.6
DT37	N	N	31.4	22.5	25.2	27.8	24.4	22.8	24.3
DT39	Y	Y	37.0 **(41.2)**	28.0 (30.6)	32.7 (36.5)	33.3 (37.4)	30.6 (34.2)	29.0 (32.9)	25.9 (29.2)
DT75	N	N	21.8	16.1	18.9	18.6	17.3	17.0	16.8
DT98	N	N	N/A	N/A	30.7	31.4	27.1	27.7	25.2

Bias Correction Factor used: NF – National Factor / LF – Local Factor
N/A – no data held

The results show that NO_2 concentrations have been steadily falling for the last seven years, with levels remaining below 10% of the annual objective level the last three years.

Analysis of Trends in NO_2 Monitoring Data

According to LAQM TG.(22), when considering whether to revoke or amend an AQMA, local authorities should consider measurements for several years or more (i.e. three to five years). They should also investigate national trends and local influences that may be affecting the AQMA. The guidance also states that when conducting trend analysis, several years' worth of data should be assessed to demonstrate whether trends are statistically significant. The reason for this is because

changes in concentrations occur from year to year due to meteorological conditions. Given that the Council has obtained seven years of data for most of the monitoring sites used in this review, it can be confident of the findings.

This section considers the trends in annual mean concentrations measured in the period 2019-2025 within AQMA 3 against the annual mean objective level of 40*µg/m*^{3}. Figure 8 presents the same information from Table 1 in graphical form.

LAQM.TG (22) states that "*exceedances of the NO_2 1-hour mean are unlikely to occur where the annual mean is below 60µg/m*^{3}". From the above table it is clear that monitoring values at all sites for the last seven years are significantly below the annual mean value of 60µg/m3. Therefore, the Council does not consider there to be a risk of exceedance of the hourly objective at any site.

AQMA No.3 - Trends in NO_2 concentrations

Figure 8 below shows that although concentrations exhibit a small year on year variability, the overall trend is for concentrations to have declined since 2019. Once bias and distance corrected, all diffusion tube sites have experienced concentrations below 10% of the annual objective level since 2023. The Council is now confident that levels will not exceed the objective in future years.

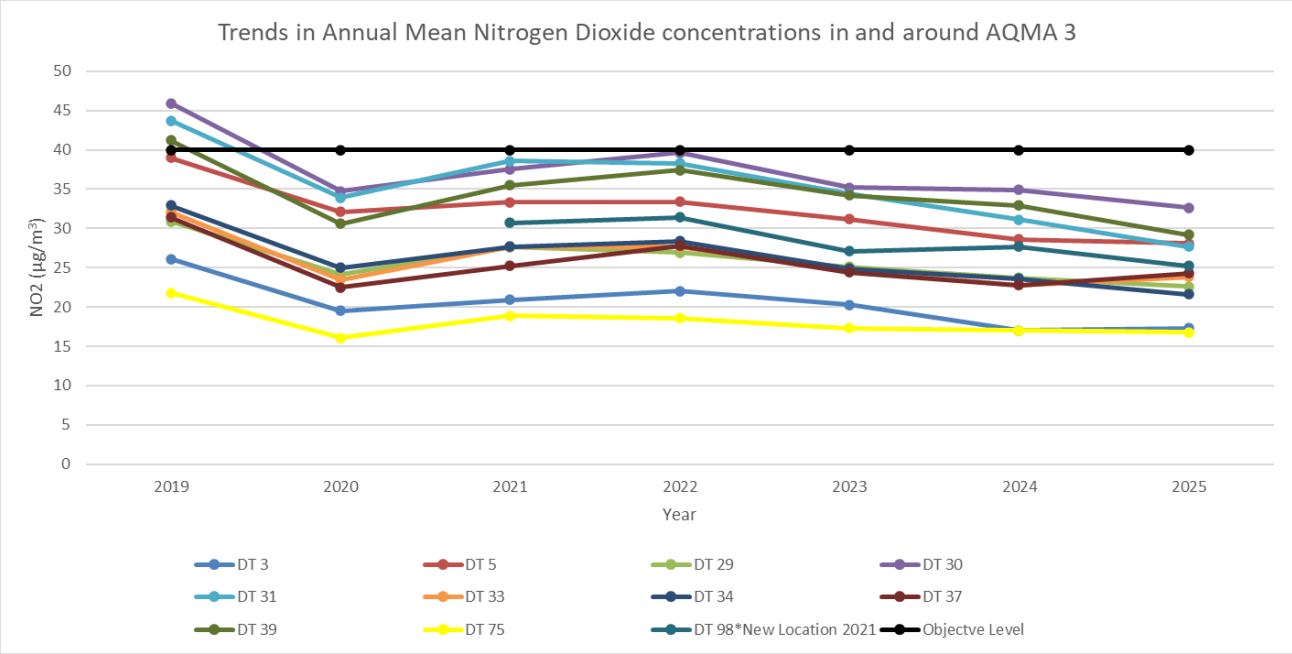

Figure 3: Trends in annual mean NO2 concentrations in and around AQMA 3

Due to NO_2 concentrations remaining below the annual mean objective level for the last three years, it is proposed that AQMA No.3 is revoked.

Conclusions and Recommendations

Monitoring of nitrogen dioxide indicates that there is no continuing exceedance of the annual average objective level in AQMA No.3.

In light of the above, it is recommended that the following actions are taken:

- AQMA No. 3 is revoked.

As such, and following approval of this report by Defra, consultation will take place with members of the council, the statutory consultees and the public. Following consultation, and assuming

approval of the proposed action by the local authority Executive, it is recommended that the AQMA is revoked.

Monitoring will continue within and around the AQMA where exceedance has historically occurred. Further changes to any of Ipswich's other AQMAs will be made as and when required, dependent on the outcome of any Further Assessment and future monitoring or air quality modelling results.

Appendix F: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England[3]

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

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

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
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.