Rugby Borough Council

2025 Air Quality Annual Status Report (ASR)

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

Date: September, 2025

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Local Responsibilities and Commitment

This ASR was prepared by the Environmental Health and Community Safety Team of Rugby Borough Council with the support and agreement of the following officers and departments:

- Planning and Development; and
- Growth and Investment.

This ASR has been approved by:

David Burrows Chief Officer for Regulation and Safety

This ASR has not been signed off by a Director of Public Health.

If you have any comments on this ASR please send them to Verna Zinclair (Team Leader, Environmental Health and Community Safety) at:

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Executive Summary: Air Quality in Our Area

Air Quality in Rugby Borough Council

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

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.

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.

Rugby Borough Council (RBC) continued our participation in the Air Quality Alliance. The Coventry and Warwickshire Air Quality Alliance meet on a quarterly basis. Public Health Warwickshire work in partnership with Coventry City Council, Solihull Metropolitan Borough Council, UK Health Security Agency (UKHSA) and the district and borough councils in Warwickshire. The Alliance aims to be a multi-profession partnership forum to share ideas and evidence-based practice to agree on overarching areas for action, and to co-ordinate collective action to address air quality.

The Air Quality and Planning Supplementary Planning Document (SPD) 2021[1] related to Local Plan policy HS5 sets guidance for developers and their consultants to follow when assessing air quality impacts in the borough. This allows decision makers to follow a consistent methodology and reduce potential for cumulative impacts. This guidance was developed in co-operation between Coventry City Council, Coventry & Warwickshire Public Health, Nuneaton and Bedworth Borough Council, Rugby, Stratford District Council and Warwick District Council. The SPD has been effective to seek air quality neutral and mitigation measures for new housing developments and smaller development parcels.

Councillor Claire Edwards (Communities and Homes, Regulation and Safety Portfolio Holder) and the other councillors representing residents within the RBC see the yearly ASRs through committee scrutiny and are engaged in discussions around air quality during the year.

There is an increasing interest in air quality with the national focus on $PM_{2.5}$ and through the engagement process of the Air Quality Action Plan (AQAP), this is improving understanding of the ASR and local air quality monitoring. The level of wider interest and understanding is however relatively low.

In 2024, an updated AQAP for RBC has been published, which sets out measures in place over the period of 2024 – 2028 to ensure ongoing compliance with the objectives.

Conclusions and Priorities

During 2024, there were no exceedances of the annual mean nitrogen dioxide (NO_2) Air Quality Standard (AQS) objective at any monitoring sites, including within the one AQMA in

[1] RBC (2021) Air Quality SPD, available at: https://www.rugby.gov.uk/w/air-quality-supplementary-planning-document-spd-

RBC (Rugby AQMA). The highest recorded annual mean NO_2 concentration was 31.8 µg/m^3 at site S2, which is located at Church Street, Shilton, outside the AQMA.

RBC's main priorities for the coming year are outlined below:

1. Warwickshire County Council (WCC) has recently secured capital funding to expand its traffic monitoring and surveying capabilities and support evidence-based decision making to tackle climate impacts and air quality management. This will allow WCC to monitor the effectiveness of schemes and initiatives in tackling air quality issues and identify the impact of development proposals on air quality and carbon.
2. WCC will deliver improvements to the A426 Avon Mill roundabout and the junction of Hunter's Lane with Newbold Road in the second half of 2025. This will reduce congestion on the currently very congested A426 corridor and will provide additional crossing facilities for pedestrians and cyclists, which will improve access to Rugby Town Centre via sustainable modes.
3. Town centre regeneration public realm priority projects such 'The Stitch'. 'The Stitch' is a metaphor for binding the north and south of the town together and is represented by projects 1-3. This project received lots of attention and positive comments from local residents in response to the engagement event. Project 1 is identified as the central, catalyst project. As part of the Stitch, this becomes the central link of the area, giving the clock tower more room within its environment and providing a nicer place to sit and spend time in. The wider Stitch proposals would transform the route through the town centre, stitching the town together by slowing vehicle speeds, removing pedestrian barriers, introducing regular courtesy crossings. The overall aim of the project is to reduce vehicle numbers and make it easier for pedestrians and cyclists to live and navigate through Rugby.
4. Improvement in council homes to improve energy efficiency. This should benefit air quality improvements and lessen existing adverse impacts.
5. To maintain compliance with the AQS objectives to ensure revocation of the AQMA. Evidence to support revocation is outlined in the supplementary document, Appendix H. If, and when, the AQMA is revoked, put in place a robust Air Quality Strategy for RBC.

How to get Involved

The general public can take simple measures to help improve air quality, the main ones being, where possible, making short trips and journeys on foot or by bike instead of by car, or using public transport. Car sharing with colleagues, or with other parents on the school run, are some other examples of ways to reduce traffic congestion. Other measures are listed below:

- Purchasing low-emission electric and/or hybrid vehicles, with government funding and grants available;
- Upgrading boilers to newest and most efficient gas condensing boilers with lowest nitrogen oxides (NO_x) (and carbon) emissions;
- Renewable energy generation via solar photovoltaics or wind turbine installation (although the individual effect on air quality is minor and non-local);
- Reducing the use of open fires and wood-burning stoves;
- Ensuring only permitted appliances and fuels are burnt in the 'Smoke Free Zone' across the urban area; and
- Following sustainable practices.

Further information can be found on the Council's website[2], and Defra's Local Air Quality Management (LAQM) website[3].

[2] Rugby Borough Council Air Pollution website: https://www.rugby.gov.uk/info/20021/pollution/217/air_pollution

[3] Defra LAQM website: http://laqm.defra.gov.uk/

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1 Local Air Quality Management

This report provides an overview of air quality in Rugby Borough Council during 2024. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995), as amended by the Environment Act (2021), and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in order to achieve and maintain the objectives and the dates by which each measure will be carried out. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by Rugby 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 Rugby Borough Council can be found in Table 2-1 – Declared Air Quality Management Areas. The table presents a description of the 1 AQMA that is currently designated within Rugby Borough Council.

Appendix D: Map(s) of Monitoring Locations and AQMAs provides maps of AQMA and also the air quality monitoring locations in relation to the AQMA. The air quality objectives pertinent to the current AQMA designation is the NO_2 annual mean.

The AQMA covers the main Rugby town area and extends to areas where land for extensive (housing) development has been identified.

In accordance with LAQM.TG22, we propose to revoke Rugby AQMA in 2025 as annual mean NO_2 concentrations within the AQMA have been compliant for five consecutive years. A revocation assessment has been included in Appendix H of this ASR. Upon revocation of this AQMA a local Air Quality Strategy will be developed based on the current AQAP.

Table 2-1 – Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Rugby AQMA (NO_2)	Declared 16/12/2004,	NO_2 Annual Mean	The area covers the whole urban area of Rugby bounded by the southern boundary with Daventry District Council, A5, M6, minor roads to the west of Long Lawford, A45 and M45.	YES	59.3	30.8	5 years	Rugby Borough Council AQAP, 2010 Draft AQAP (2024-2028) adopted in 2024	https://www.rugby.gov.uk/documents/20124/0/Draft+Air+Quality+Action+Plan+%281%29.pdf/197aa93d-44c7-4b3c-4bd6-980b04c7d791?t=1730203973780

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

☒ **RBC confirm that all current AQAPs have been submitted to Defra.**

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

Defra's appraisal of last year's ASR concluded the report was well structured, detailed, and provided the information specified in the Guidance. The following comments were provided which have been addressed in this year's report, with RBC responses provided in bold where relevant:

1. Trends of annual mean NO_2 concentrations are clearly presented in detail through both graphs and discussion within the text. A robust comparison with air quality objectives is provided.

2. There are maps of the monitoring locations across the council's area of jurisdiction, including the AQMA boundary. These are clear and are commended.

3. The priorities for the local authority in the 2024 reporting year are clearly listed, including the publication of their final AQAP.

4. Since the previous 2023 ASR, the council submitted a draft AQAP in January 2024. The finalisation and adoption of the AQAP in late 2024 is clearly outlined as a priority for the council.

5. It is not discussed in the text if there are any changes to the monitoring strategy within 2023. This would be helpful to state in future reports. ***This has been added to the 2024 ASR submission***

6. The Council has triplicate diffusion tubes co-located with one automatic monitor, they have compared the calculated local bias adjustment factor and national factor, and justified the factor used. This is welcomed.

7. The ASR has not been approved by the relevant public health body; this should be considered in future years. ***RBC will seek to obtain approval from the Director of Public Health.***

8. Overall, the report is well presented and follows the relevant guidance. The council should continue their good work in their 2025 ASR.

RBC has taken forward a number of direct measures during the current reporting year of 2024 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2-2 – Progress on Measures to Improve Air Quality. Where there have been, or continue to be, barriers restricting the implementation

of the measure, these are also presented within Table 2-2 – Progress on Measures to Improve Air Quality.

More detail on these measures can be found in the AQAP[4], RBC's Local Plan 2011 – 2031[5] and Air Quality and Planning SPD[6]. Key completed measures are:

- Expansion of Traffic Monitoring and Survey Capabilities – WCC introduced an in-house new rapid roadside screening tool in 2024 for air quality modelling to the screen the impact of air quality measures.
- Warwickshire Local Cycling and Walking Infrastructure Plan (LCWIP) – WCC approved the plan in Feb 2024. A survey carried out prior to the approval of the plan, showing favourable public interest in using the cycling and walking routes identified in the plan.[7]

RBC's priorities for the coming year are:

1. WCC will deliver improvements to the A426 Avon Mill roundabout and the junction of Hunter's Lane with Newbold Road in the second half of 2025. This will reduce congestion on the currently very congested A426 corridor and will provide additional crossing facilities for pedestrians and cyclists, which will improve access to the town centre via sustainable modes.
2. To maintain compliance with the AQS objectives to ensure revocation of the AQMA. If, and when, the AQMA is revoked, put in place a robust Air Quality Strategy for RBC.

RBC worked to implement these measures in partnership with Warwickshire County Council and neighbouring boroughs.

The principal challenges and barriers to implementation that RBC anticipates facing are:

- Staff changes which may impact response times; and

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[4] RBC. 2010 Air Quality Progress Report and Action Plan Progress Report for Rugby Borough Council, May 2010.

[5] RBC. Local Plan 2011 – 2031, June 2019

[6] RBC (2021) Air Quality SPD, available at: https://www.rugby.gov.uk/w/air-quality-supplementary-planning-document-spd-

[7] RBC (2022) Local Cycling and Walking Infrastructure Plan (LCWIP) Consultation available at: https://democracy.warwickshire.gov.uk/documents/s35368/Appendix%201%20for%20Warwickshire%20LCWIP%20Consultation%20Report.pdf

- WCC or national project timescales outside of direct RBC control.

RBC anticipates that the measures stated above and in Table 2-2 – Progress on Measures to Improve Air Quality will maintain compliance in future years following the revocation of the Rugby AQMA.

Table 2-2 – Progress on Measures to Improve Air Quality

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
1	Proposed Rugby Parkway station at Houlton, close to M1 J18	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	2023	2030	WCC, DfT, Network Rail	County, National Govt.	Not Funded	>£10 million	Planning	0.5 µg/m^3 at two locations where traffic is reduced. <0.1 µg/m^3 adverse impacts elsewhere	Passenger usage (expected ~2,000 passengers a day) CBA = 6	Plans introduced in Jan 2023, application submitted later in 2023 (RBC/23CC003). Air Quality assessment carried out indicated with development some small decreases in concentrations are estimated.	New strategic park and ride for Houlton. Should ease congestion on the road network around Rugby Town Station by providing a second access to the local and national rail network for residents and businesses in Rugby. Construction of the station is anticipated to begin in 2025 subject to funding and necessary consents being secured.
2	Homestead Link	Transport Planning and Infrastructure	Other	2023	2026	WCC	S106	Not Funded	£1 million - £10 million	Planning	Modelling indicated a reduction in NO_2 between -0.6 µg/m^3 and -1.8 µg/m^3. Negligible, slight beneficial and Moderate beneficial impacts.	Traffic volumes, Queue lengths and junction waiting times. CBA = 6	Consultation in 2021. Still at planning stage, live at present (2023)	Intended to take traffic away from areas of elevated pollution within the AQMA. Due to connect onto the A426 (Rugby Road) with a new roundabout, before heading west to connect with Alwyn Road and Cawston Lane. It will then turn south, crossing over the Northampton Lane byway, to join the B4429 (Coventry Road) to the west of Dunchurch. Initial modelling results show 30-35% reduction in peak traffic so could have significant benefits.
3	Potsford Dam Link	Transport Planning and Infrastructure	Other	2023	2028	WCC	S106	Not Funded	£1 million- £10 million	Planning	Reduced emissions of NO_2 from traffic.	Traffic volumes, Queue lengths and junction waiting times CBA = 6	Consultation at Planning stage	Reconfiguration of Coventry Road onto the new Potsford Dam link, alignment altered to tie directly into existing Potsford Dam roundabout on the Rugby link road. Intended to take traffic away from areas of elevated pollution within the AQMA. Compulsory land purchases likely to delay scheme.
4	Installation of EV Charging points in RBC Carpark	Promoting Low Emission Transport	Other	2023	2028	RBC	Local	Funded	£50k - £100k	Planning	1-4% Road NOx emissions reductions.	Number of active charging points CBA = 4	14 on street charging in 3 locations in Town Centre. 85 overall across the borough currently	WCC have received LEVI funding to install a significant number of Charging points across Rugby. RBC planning to install EV charging in a Town Centre carpark. 100 additional chargers have been assumed, overall.
5	Improvements to the A426 Avon Mill roundabout and the junction	Transport Planning and Infrastructure	Other	2023	2026	WCC	County	Funded	£1 million - £10 million	Planning	Reduced emissions of NO_2 from traffic.	Queue lengths and junction waiting times.	Cabinet gave approval for officers to produce an OBC in 2023. No air quality	Traffic modelling shows substantial queue reductions on gyratory which is

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
	of Hunter's Lane with Newbold Road											CBA = 3	specific assessment of scheme yet, appointment pending. March 2025 construction has to start, 2026-2027 to open.	expected to improve local air quality. New pedestrian and cycle path with bridge on North (east)side of roads and junctions, to be linked to existing routes. Should target LGV emissions from source apportionment, as scrap businesses in Avon Mill.
6	Licensing Policy Taxi replaced to low emission vehicles	Promoting Low Emission Transport	Taxi Licensing conditions	2020	2028	RBC	Local	Funded	< £10k	Implementation	Reduced emissions of NO_2 from traffic.	Number of taxis meeting licensing conditions (key metrics newer fleet vehicles) CBA = 3	Ongoing progress	From 1 January 2022 all new and existing private hire vehicles with Euro 4 petrol or Euro 6 diesel engines. These vehicles are capable of being licensed for 10 years, however once the vehicle is over six years old, the licence must be renewed every six months. From 1 March 2024, all existing or replacement saloon hackney carriage vehicles must be new, white in colour, and must be new ultra-low emission or zero emission capable.
7	Air Quality Supplementary Planning Document	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2021	2028	RBC	Local	Funded	< £10k	Implementation	Not quantifiable	Number of applications in which it is applied CBA = 3	Guidance adopted July 2021	The overall aim is to improve the quality of new development and facilitate a consistent and transparent approach to decision making. This guidance has been developed in co-operation between Coventry City Council, Coventry & Warwickshire Public Health, Nuneaton and Bedworth Borough Council, Rugby, Stratford District Council and Warwick District Council.
8	Warwickshire County Council (WCC) to expand its traffic monitoring and surveying capabilities and support evidence-based decision making in the County's approach to tackling climate impacts and air quality management.	Traffic Management	Other	2023	2024	WCC	County	Funded	£10k - 50k	Planning	Not quantifiable	Traffic Counts undertaken annually. CBA = 2	No progress update	During 2023 WCC intended to bring a new rapid roadside screening tool for air quality modelling in house, which can help to screen the impact of measures. ANPR data also to be available for more detailed modelling should this be required.
9	Safe and Active Schools (road safety education and active	Promoting Travel Alternatives	School Travel Plans	2022	2028	WCC	County	Funded	£10k - 50k	Implementation	Not quantifiable	Schools' Plan Uptake Rates CBA = 2	In place since March 24	Also a pilot project plan to close a street leading to school in Rugby to encourage

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
	travel). The Safe and Active Schools programme													active travel and reduce congestion around school, which will include monitoring
10	The Safe and Active Workplace	Promoting Travel Alternatives	Workplace Travel Planning	2022	2028	WCC	County	Funded	£10k - 50k	Implementation	Not quantifiable	Workplaces' Plan Uptake Rates CBA = 2	Ongoing work	
11	Increased connectivity to green spaces	Other	Other	2023	2023	RBC / WCC	UKSPF	Funded	£10k - 50k	Implementation	Not quantifiable	Parking / traffic numbers in town centre CBA = 2	RBC involved with input from WCC Highways	Creation of new entrance to Caldecott Park to increase non-vehicle traffic in town centre, discouraging vehicular journeys
12	Neighbourhood Car Share Scheme	Promoting Travel Alternatives	Personalised Travel Planning	2021	2028	RBC/WCC	RBC/WCC	Funded	£10k - 50k	Implementation	Not quantifiable	Reduction in the number of car-based journeys being made within the borough CBA = 2	There is car share scheme operating across Coventry and Warwickshire.	RBC looking at options for staff to join the scheme as an organisation with internal promotion though emails and updates. Promotion of the scheme externally via the website and Social Media platforms.
13	Control Of Industrial Emissions	Environmental Permits	Measures to reduce pollution through IPPC Permits going beyond BAT	2023	2028	RBC	Local	Funded	£10k - 50k	Implementation	Not quantifiable	100% compliance with permits allocated CBA = 2	42 Permitted Industrial Pollution Process (100% inspections completed) achieved 100% compliance improvements.	Ongoing implementation of Council's permitting requirements
14	Control Of Domestic Combustion	Policy Guidance and Development Control	Other policy	2023	2028	RBC	Local	Funded	£10k - 50k	Implementation	Not quantifiable	Reduction in complaints CBA = 2	Designated smoke Control Area (chimneys) and section 79 of the EPA 1990 actively implemented where problems are identified. Section 79 of the EPA 1990 actively implemented where problems are identified.	Relatively low priority. Low number of complaints.
15	Air Quality Monitoring	Public Information	Other	2023	2028	RBC	Local	Funded	£10k - 50k	Implementation	Not quantifiable	Trends in pollutants and number of monitoring sites CBA = 2	In addition to Council's core LAQM monitoring regime, applied for Defra funding for particulate monitoring, but rejected. Also looking to set up 5 schools in Rugby to have internal and external monitoring, to include NOx and PM. This will help identify if PM is an issue that needs further work.	Used to track compliance and impacts of measures.

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

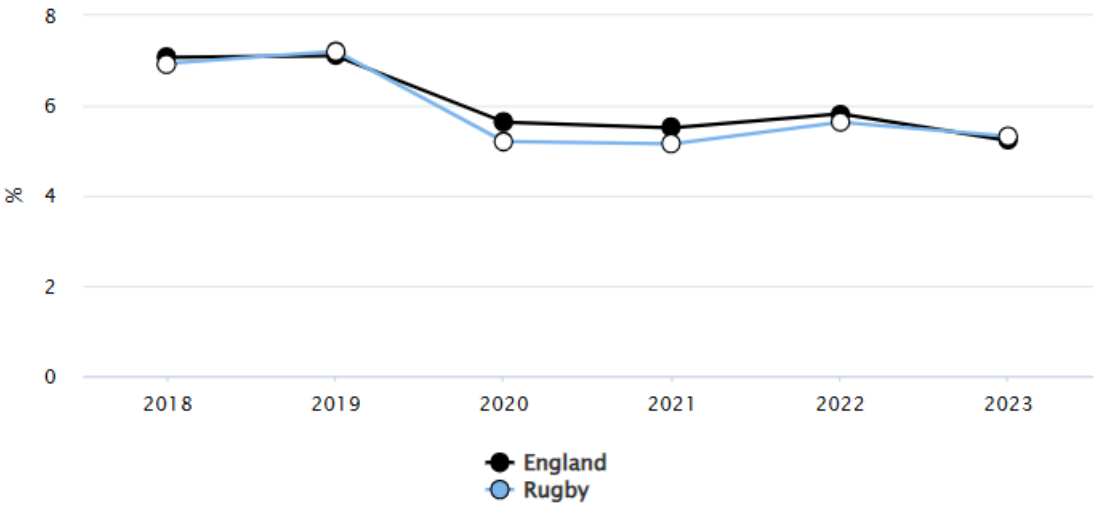
As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy[8], local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter ($PM_{2.5}$)). There is clear evidence that $PM_{2.5}$ (particulate matter smaller 2.5 micrometres)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

The Public Health Outcomes Framework (PHOF)[9] includes an indicator relating to the fraction of mortality attributable to particulate pollution. This indicator enables Directors of Public Health to prioritise action on air quality in their local area to help reduce the health burden from air pollution. Indicator D01 'Fraction of mortality attributable to particulate air pollution' addresses the fraction of mortality attributable to particulate air pollution (specifically, $PM_{2.5}$ only), a value for which is presented for each local authority. In Rugby the PHOF D01 indicator estimates the fraction of mortality attributable to particulate air pollution is 5.3% for 2023. This is slightly below the percentage mortality attributable to the West Midlands Region and for England, at 5.1% and 5.2% respectively. This is illustrated in Figure 2-1.

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

[9] DHSC, Public Health Outcomes Framework, 2025, available at: https://fingertips.phe.org.uk/profile/public-health-outcomes-framework

Figure 2-1 Public Health Outcomes Framework, Fine Particulate Matter ($PM_{2.5}$)



Particulate matter can have a significant effect on public health. Modelling estimates suggest that a reduction of one µg/m^3 of $PM_{2.5}$ in 2017 in England could prevent 50,900 cases of coronary heart disease, 16,500 strokes, 4,200 lung cancers and 9,300 cases of asthma in people aged over 18 years by 2035.

RBC is taking the following measures to address $PM_{2.5}$:

- Controlling of Industrial Emissions.
- Control of Domestic Combustion.
- Installing of EV Charging points in RBC carparks.
- Licencing Policy Taxi replaced to low emission vehicles.

Supplementary air quality monitoring using 7 low-cost Airly air monitors for $PM_{2.5}$ across Rugby. The locations of the Airly monitors are shown in

- Table 2-3 – Airly Particulate Matter Sensor Information for 2024., details of the monitoring data are provided in Appendix G.

Further details on these measures are provided in the draft RBC AQAP 2024-2028.

In addition, RBC also introduced PM monitoring at 7 Airly low-cost sensor monitoring sites across Rugby in 2023, so that the extent of PM_{10} and $PM_{2.5}$ pollution can be better identified and appropriate measures implemented as required. Details of the monitoring sites are outlined in Table 2-3. The data from these monitoring sites is provided in Appendix G.

Table 2-3 – Airly Particulate Matter Sensor Information for 2024.

Sensor ID	Sensor Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)
115588	Ashlawn school	452399	273512
115343	Henry Hinde Junior School	447938	274680
115392	Houlton school	455309	274634
115580	Rugby free primary school	452088	278470
115419	Rugby Town Hall	450194	275490
115294	St Andrews Benn - front entrance	451532	275704
115301	St Andrews Benn - rear entrance	451506	275647

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

This section sets out the monitoring undertaken within 2024 by RBC and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a five-year period between 2020 and 2024 to allow monitoring trends to be identified and discussed.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

RBC does not undertake automatic (continuous) monitoring. The Council previously had a continuous particulate monitor at Parkfield Road. This was decommissioned in December 2017 due to consecutive years of low pollutant concentrations.

RBC now undertake air quality monitoring via seven low-cost sensors (Airly), which were installed in 2023. However, as these are not reference-grade monitors, the data cannot be used for compliance monitoring with RBC, and thus the data has not been presented within this Chapter of the ASR. These sensors are designed to provide indicative monitoring only. A summary of the data is provided in Appendix G for further reference.

Local authorities do not have to report annually on the following pollutants: 1,3 butadiene, benzene, carbon monoxide and lead, unless local circumstances indicate there is a problem.

3.1.2 Non-Automatic Monitoring Sites

RBC undertook non- automatic (i.e. passive) monitoring of NO_2 at 53 sites during 2024. Table A.1 in Appendix A presents the details of the non-automatic sites. There has been no change in number of monitoring locations or their corresponding positions from that reported in the previous ASR in 2024.

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.2 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 40 µg/m^3. Note that the concentration data presented represents the concentration at the location of the monitoring site, following the application of bias adjustment and annualisation, as required (i.e. the values are exclusive of any consideration to fall-off with distance adjustment).

For diffusion tubes, the full 2024 dataset of monthly mean values is provided in Appendix B. Note that the concentration data presented in Table B.1 includes distance corrected values, only where relevant.

Figure A.1 to Figure A.6 illustrate illustrate a consistent borough-wide reduction in NO_2 concentrations over time. There was a slight increase between 2020 and 2021 which was likely due to the increases in traffic flow following the COVID-19 pandemic. Concentrations have decreased between 2021 and 2023 down to levels observed during the pandemic and there is a continued reduction into 2024 with 22 of the 53 monitoring locations across RBC measuring a decrease in annual mean NO_2 concentrations compared to 2023. This highlights how national and local air quality measures implemented by RBC have likely contributed to improved air quality.

During 2024, there were no exceedances of the annual mean NO_2 AQS objective. The lowest recorded annual mean NO_2 concentration was 8.1 µg/m^3 at S4 (Wolston School). The highest recorded annual mean NO_2 concentration was 31.8 µg/m^3 at S2 (Church Street Shilton), located outside of the AQMA. This is a reduction from the 2023 concentration recorded at S2 of 34.2 µg/m^3. S2 has not exceeded the annual mean NO_2 AQS objective in the past 5 years, covering 2020-2024.

As five years of consecutive compliance have been achieved, revocation of the AQMA has been considered. Appendix H outlines the revocation assessment to support this.

There were no monitoring locations which saw an annual mean greater than 60 µg/m^3. This indicates it is unlikely that the 1-hour mean AQS objective for NO_2 was exceeded at any monitoring sites.

3.2.2 Particulate Matter (PM_{10})

RBC ceased PM_{10} (particulate matter with an aerodynamic diameter of 10µm or less) monitoring in December 2017. Monitoring at the Parkfield Road location was originally commenced to investigate particulate matter concentrations at sensitive receptors near to the Cemex Climafuel facility, but there were no monitored exceedances of the PM_{10} annual mean or short-term mean AQS objectives after several years of monitoring.

3.2.3 Particulate Matter ($PM_{2.5}$)

RBC ceased $PM_{2.5}$ monitoring at the Parkfield Road location in December 2017, as there were no monitored exceedances of the $PM_{2.5}$ annual mean target value after several years of monitoring.

As no $PM_{2.5}$ monitoring is undertaken, $PM_{2.5}$ background concentrations from Defra Background Maps[10] have been reviewed. In 2024, the highest background $PM_{2.5}$ concentration within the Rugby AQMA was 7.7 µg/m^3 (450500, 275500). Outside the AQMA the highest $PM_{2.5}$ concentration in 2024 was 7.4 µg/m^3 (438500, 282500). Both maximum concentrations are significantly below the AQS objective of 20 µg/m^3 and are on track to meet the 2040 target of 10 µg/m^3. These levels are similar to those from the Airly monitors where period concentrations ranged from 4.6-8.3 µg/m^3 (see Appendix G).

3.2.4 Sulphur Dioxide (SO_2)

RBC does not conduct continuous monitoring of SO_2.

[10] Defra, Background Maps: Background Maps | LAQM (defra.gov.uk)

Appendix A: Monitoring Results

Table A.1 – 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)
S1	Newbold oppShop	Kerbside	449000	277178	NO_2	YES - Rugby AQMA	0.0	0.5	No	2.5
S2	Church ST shilton	Roadside	440416	284401	NO_2	NO	0.0	1.5	No	2.5
S3	69 School St Lawford	Urban Background	447316	276162	NO_2	YES - Rugby AQMA	0.0	15.0	No	2.5
S4	Wolston School	Urban Background	441131	275648	NO_2	NO	0.0	90.0	No	2.5
S5	High St Ryton	Kerbside	438642	274418	NO_2	NO	25.0	0.5	No	2.5
S6	2 Westfield Road	Urban Background	449671	274795	NO_2	YES - Rugby AQMA	0.0	10.0	No	2.5
S7	69 Cybeline Way	Urban Background	448863	272786	NO_2	YES - Rugby AQMA	0.0	10.0	No	2.5
S8	Newbold Rd opp Benn Hall	Kerbside	450138	275557	NO_2	YES - Rugby AQMA	10.0	1.0	No	2.5
S9	Argyle St Keyshop	Roadside	451187	275334	NO_2	YES - Rugby AQMA	0.0	5.0	No	2.5
S10	WebbEllis Pub	Roadside	450069	275040	NO_2	YES - Rugby AQMA	0.0	5.0	No	2.5
S11	15 Oliver Street	Roadside	449787	275224	NO_2	YES - Rugby AQMA	0.0	5.0	No	2.5
S12	Boughton leigh School	Urban Background	451445	277245	NO_2	YES - Rugby AQMA	0.0	56.0	No	2.5
S13	Avon Mill Pub	Roadside	450088	276229	NO_2	YES - Rugby AQMA	15.0	3.0	No	2.5
S14	Binley Woods Village Hall	Urban Background	439450	277523	NO_2	NO	0.0	20.0	No	2.5
S15	Lawford Rd/Jubilee St	Kerbside	449168	275411	NO_2	NO	0.0	0.5	No	2.5
S16	Citrus Hotel A45	Roadside	436867	275275	NO_2	NO	0.0	19.0	No	2.5
S17, S18, S19	Stanford Gardens Leamington Spa	Roadside	431271	266404	NO_2	NO		6.0	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)
S20	Essex St Newbold Rd	Roadside	450137	275849	NO_2	YES - Rugby AQMA	25.0	3.0	No	2.5
S21	Percival Rd/Ashlawn Rd	Roadside	451698	273273	NO_2	YES - Rugby AQMA	15.0	2.0	No	2.5
S22	Fisher Ave/Ashlawn Rd	Roadside	452403	273567	NO_2	YES - Rugby AQMA	18.0	5.0	No	2.5
S23	Paddox Pub	Roadside	452672	273633	NO_2	YES - Rugby AQMA	13.0	3.0	No	2.5
S24	DunCow pub	Kerbside	448496	271244	NO_2	YES - Rugby AQMA	0.0	0.5	No	2.5
S25	Crysrals Dunchurch	Roadside	448414	271175	NO_2	YES - Rugby AQMA	0.0	2.0	No	2.5
S26	Lawford Rd Fiats	Roadside	448999	275505	NO_2	YES - Rugby AQMA	0.0	12.0	No	2.5
S27	Leamington Rd Ryton	Roadside	449435	275543	NO_2	NO	7.0	2.5	No	2.5
S28	256 parkfield Road	Roadside	449011	276329	NO_2	YES - Rugby AQMA	0.0	2.0	No	2.5
S29	Avon Valley School	Urban Background	449575	276540	NO_2	YES - Rugby AQMA	0.0	35.0	No	2.5
S30	Murray Rd Bus stop	Kerbside	451107	275838	NO_2	YES - Rugby AQMA	0.0	0.5	No	2.5
S31	Wood St Myson House	Roadside	450848	275849	NO_2	YES - Rugby AQMA	0.0	3.0	No	2.5
S32	Station Bar	Roadside	450750	275547	NO_2	YES - Rugby AQMA	0.0	3.0	No	2.5
S33	Alma lodge	Roadside	450510	275355	NO_2	YES - Rugby AQMA	0.0	3.0	No	2.5
S34	Oxfam	Roadside	450405	275329	NO_2	YES - Rugby AQMA	0.0	3.0	No	2.5
S35	Pappa Johns	Roadside	450444	275236	NO_2	YES - Rugby AQMA	0.0	3.0	No	2.5
S36	Daisy Kins	Roadside	450870	275043	NO_2	YES - Rugby AQMA	12.0	3.0	No	2.5
S37	Lower Hillmorton Rd Old Doctors	Roadside	450897	275059	NO_2	YES - Rugby AQMA	5.0	2.0	No	2.5
S38	Clifton Rd Townsend Rd	Kerbside	451868	275501	NO_2	YES - Rugby AQMA	9.0	0.5	No	2.5
S39	Clifton Rd Murray Rd	Roadside	450852	275116	NO_2	YES - Rugby AQMA	0.0	5.0	No	2.5
S40	Drury Lane Rugby Tap	Roadside	450181	275029	NO_2	YES - Rugby AQMA	0.0	5.0	No	2.5
S41	Yellow house Bilton Rd	Roadside	450010	274998	NO_2	YES - Rugby AQMA	0.0	15.0	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)
S42	Crowpie pub opp bilton Rd	Roadside	448855	274352	NO_2	YES - Rugby AQMA	10.0	5.0	No	2.5
S43	Dunchurch Rd Gyrakory	Roadside	450162	274898	NO_2	YES - Rugby AQMA	4.0	3.0	No	2.5
S44	Ashlawn Rd Barby Rd	Roadside	453394	273633	NO_2	YES - Rugby AQMA	15.0	2.0	No	2.5
S45	3 Avon Cottage Bretford	Roadside	442963	277071	NO_2	YES - Rugby AQMA	11.0	3.0	No	2.5
S46	Oxford Rd Belvedere	Kerbside	437555	274561	NO_2	NO	30.0	1.0	No	2.5
S47	Regents Place Quakers	Kerbside	450445	275495	NO_2	YES - Rugby AQMA	5.0	0.5	No	2.5
S48	North Street Natwest	Roadside	450304	275314	NO_2	YES - Rugby AQMA	0.0	2.0	No	2.5
S49	Lesley Souter House	Roadside	450864	274896	NO_2	YES - Rugby AQMA	13.0	3.0	No	2.5
S50	Tesco Bilton	Roadside	448169	273625	NO_2	YES - Rugby AQMA	18.0	3.0	No	2.5
S51	Bray Close Brinklow	Roadside	443433	279208	NO_2	NO	6.0	3.0	No	2.5
S52	Green Man Dunchurch	Roadside	448537	271195	NO_2	YES - Rugby AQMA	1.0	3.0	No	2.5
S53	Covenrty Road Dunchurch	Roadside	448361	271334	NO_2	YES - Rugby AQMA	0.0	1.5	No	2.5
S54	Rugby School Lampost	Roadside	450269	274998	NO_2	YES - Rugby AQMA	0.0	1.5	No	2.5
S55	Main St Stretton	Roadside	445004	281330	NO_2	NO	5.0	2.0	No	2.5

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.2 – Annual Mean NO_2 Monitoring Results: Non-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 2024 (%) [2]	2020	2021	2022	2023	2024
S1	449000	277178	Kerbside	91.7	90.0	13.5	15.6	15.3	13.4	14.0
S2	440416	284401	Roadside	83.3	82.5	33.5	33.7	31.4	34.2	31.8
S3	447316	276162	Urban Background	83.3	82.5	9.5	9.3	9.5	8.9	8.7
S4	441131	275648	Urban Background	83.3	82.5	8.2	8.9	8.3	7.6	8.1
S5	438642	274418	Kerbside	91.7	90.0	16.4	17.7	17.6	16.9	17.6
S6	449671	274795	Urban Background	91.7	90.0	10.4	11.5	10.7	9.8	10.2
S7	448863	272786	Urban Background	83.3	82.5	8.6	9.0	8.1	7.8	8.3
S8	450138	275557	Kerbside	83.3	82.5	26.9	24.3	25.9	24.1	22.7
S9	451187	275334	Roadside	91.7	90.0	11.8	12.3	12.0	11.1	11.2
S10	450069	275040	Roadside	91.7	90.0	25.7	26.4	26.1	27.2	27.5
S11	449787	275224	Roadside	91.7	90.0	16.2	17.4	16.3	16.9	15.6
S12	451445	277245	Urban Background	66.7	65.5	14.3	13.3	13.4	13.0	11.7
S13	450088	276229	Roadside	91.7	90.0	26.7	26.5	26.6	27.2	25.7
S14	439450	277523	Urban Background	91.7	90.0	10.9	10.7	11.1	9.5	10.8
S15	449168	275411	Kerbside	91.7	90.0	22.1	20.7	26.7	24.9	20.6
S16	436867	275275	Roadside	91.7	90.0	13.5	14.6	14.1	13.3	13.9
S17, S18, S19	431271	266404	Roadside	83.3	90.0	12.7	13.2	12.6	12.2	11.2
S20	450137	275849	Roadside	75.0	75.0	19.5	20.2	17.6	18.0	21.3
S21	451698	273273	Roadside	83.3	80.6	15.5	15.8	17.2	16.1	19.7
S22	452403	273567	Roadside	75.0	75.0	15.1	16.1	15.7	14.5	14.8
S23	452672	273633	Roadside	83.3	80.6	14.4	17.1	16.8	16.1	16.9
S24	448496	271244	Kerbside	75.0	75.0	27.3	28.3	27.0	28.2	28.1
S25	448414	271175	Roadside	83.3	80.6	19.0	20.7	18.8	17.8	18.6
S26	448999	275505	Roadside	83.3	80.6	14.5	14.9	14.6	13.1	12.7
S27	449435	275543	Roadside	75.0	75.0	14.4	14.9	13.3	13.1	13.5
S28	449011	276329	Roadside	66.7	63.6	11.7	11.1	11.6	10.6	10.2
S29	449575	276540	Urban Background	83.3	80.6	16.3	18.4	15.7	13.9	13.7
S30	451107	275838	Kerbside	83.3	80.6	20.8	25.9	28.6	26.8	26.1
S31	450848	275849	Roadside	75.0	75.0	21.3	20.8	21.1	16.3	19.1
S32	450750	275547	Roadside	83.3	80.6	21.1	21.2	20.9	20.4	21.3
S33	450510	275355	Roadside	75.0	75.0	15.7	16.6	16.4	14.3	14.7
S34	450405	275329	Roadside	83.3	80.6	15.2	17.1	17.1	16.5	17.7
S35	450444	275236	Roadside	83.3	80.6	19.9	22.0	23.7	23.4	23.5
S36	450870	275043	Roadside	83.3	80.6	24.2	26.8	23.8	23.0	23.6
S37	450897	275059	Roadside	83.3	80.6	20.7	22.7	21.5	19.7	20.8
S38	451868	275501	Kerbside	75.0	75.0	17.1	19.5	18.9	16.5	19.1
S39	450852	275116	Roadside	83.3	80.6	19.6	21.0	20.8	20.6	20.9
S40	450181	275029	Roadside	83.3	80.6	22.1	23.9	23.6	21.5	22.6
S41	450010	274998	Roadside	83.3	80.6	17.8	20.4	20.2	17.2	17.8
S42	448855	274352	Roadside	83.3	80.6	15.5	17.6	16.9	15.2	16.5

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
S43	450162	274898	Roadside	83.3	80.6	19.1	20.0	21.7	18.8	19.6
S44	453394	273633	Roadside	83.3	80.6	17.5	19.8	20.4	19.7	19.9
S45	442963	277071	Roadside	75.0	75.0	16.3	13.5	17.2	15.1	15.6
S46	437555	274561	Kerbside	83.3	80.6	26.3	29.9	27.0	25.4	25.3
S47	450445	275495	Kerbside	83.3	80.6	20.2	22.6	23.0	21.2	21.5
S48	450304	275314	Roadside	83.3	80.6	23.1	22.3	24.5	23.2	24.1
S49	450864	274896	Roadside	75.0	75.0	20.6	23.2	24.7	21.5	23.1
S50	448169	273625	Roadside	83.3	80.6	16.8	18.6	18.1	14.9	16.3
S51	443433	279208	Roadside	75.0	75.0	19.0	20.6	19.8	21.1	20.6
S52	448537	271195	Roadside	83.3	80.6	14.1	15.6	14.9	12.7	13.7
S53	448361	271334	Roadside	83.3	80.6	13.7	15.0	15.2	15.0	13.1
S54	450269	274998	Roadside	83.3	80.6	28.5	31.8	32.4	29.1	30.8
S55	445004	281330	Roadside	75.0	75.0	13.5	14.4	15.6	12.0	13.8

☒ **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 2024.**

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%).

Figure A.1 – Trends in Annual Mean NO_2 Concentrations (a)

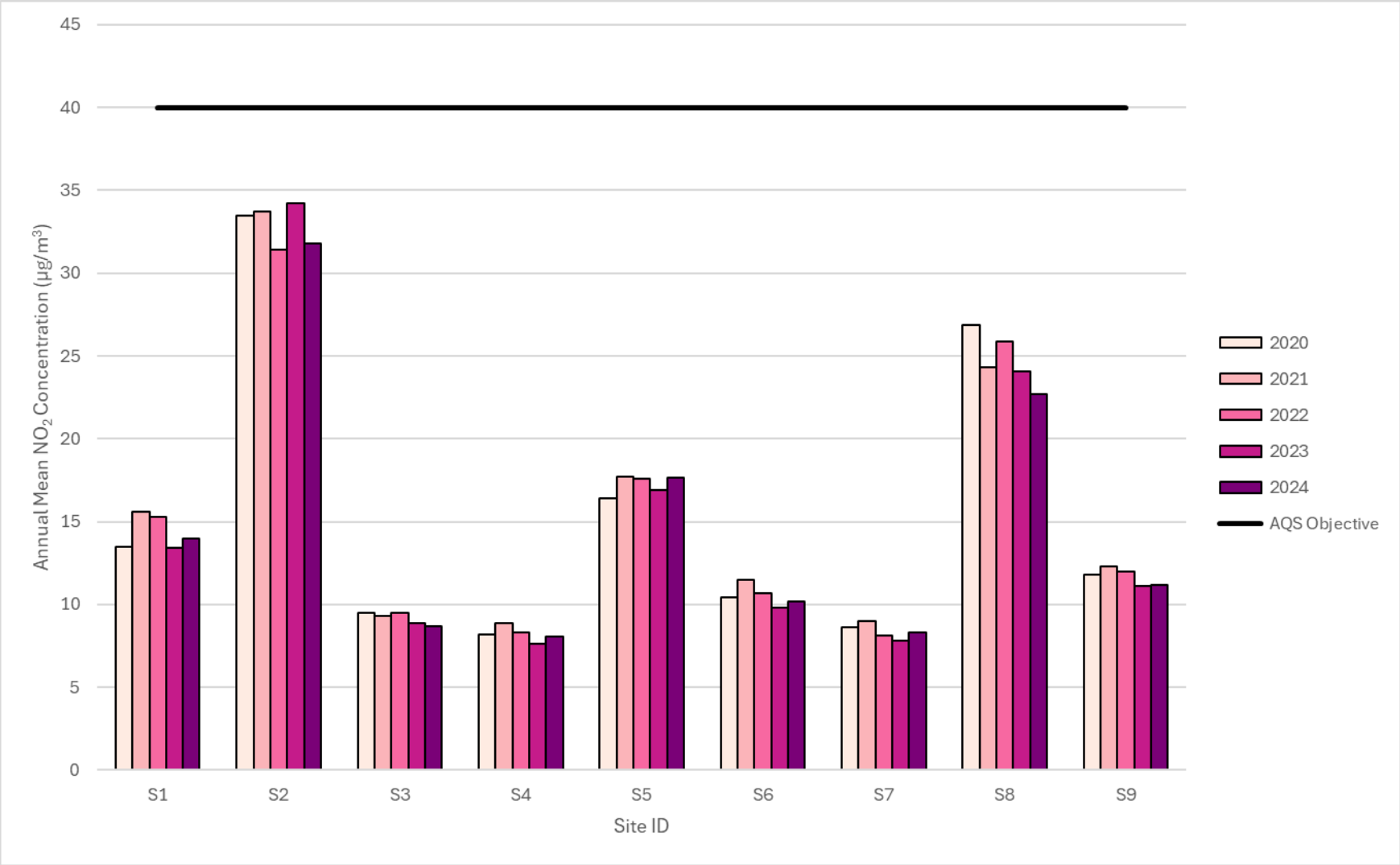


Figure A.2 – Trends in Annual Mean NO_2 Concentrations (b)

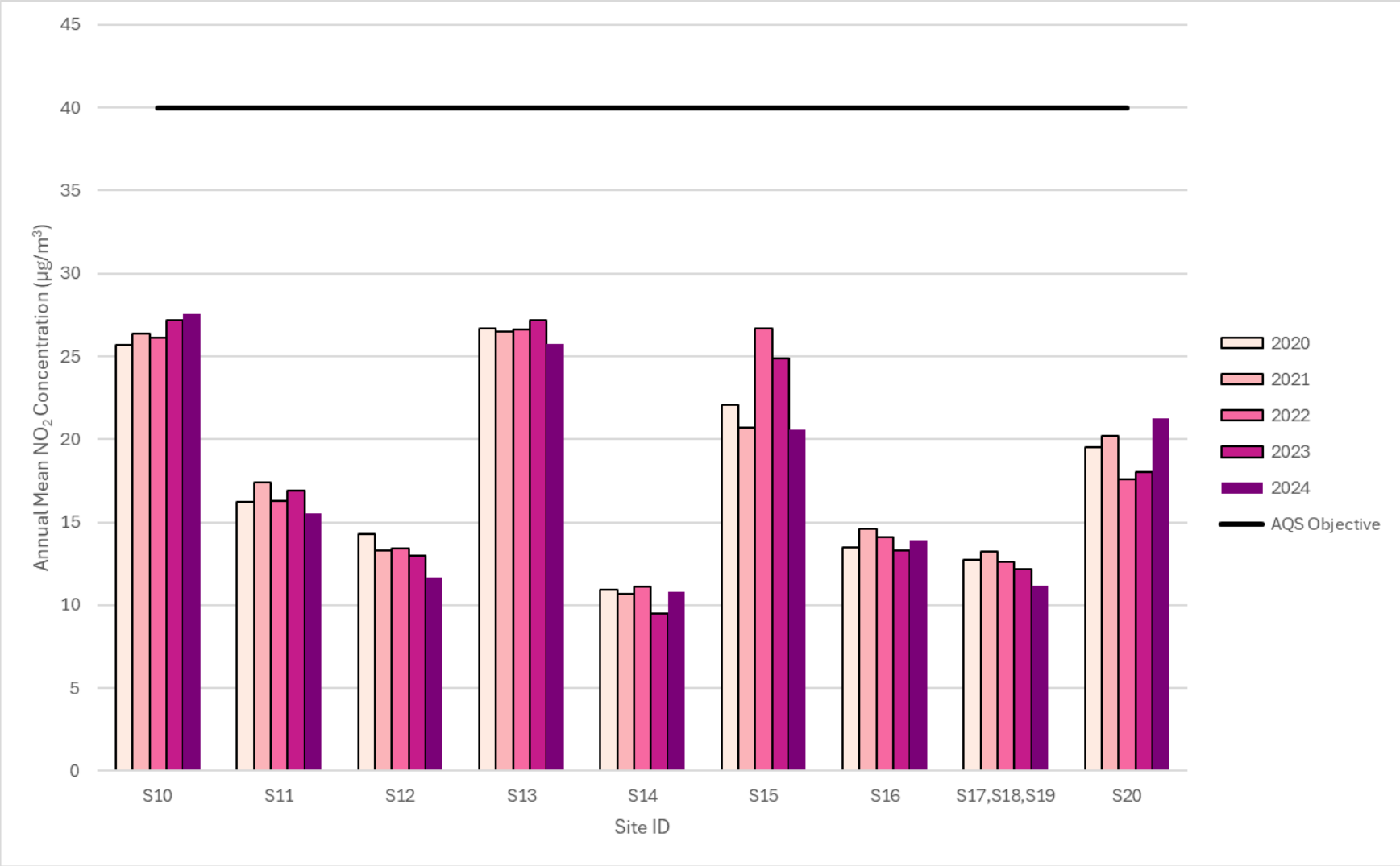


Figure A.3 – Trends in Annual Mean NO_2 Concentrations (c)

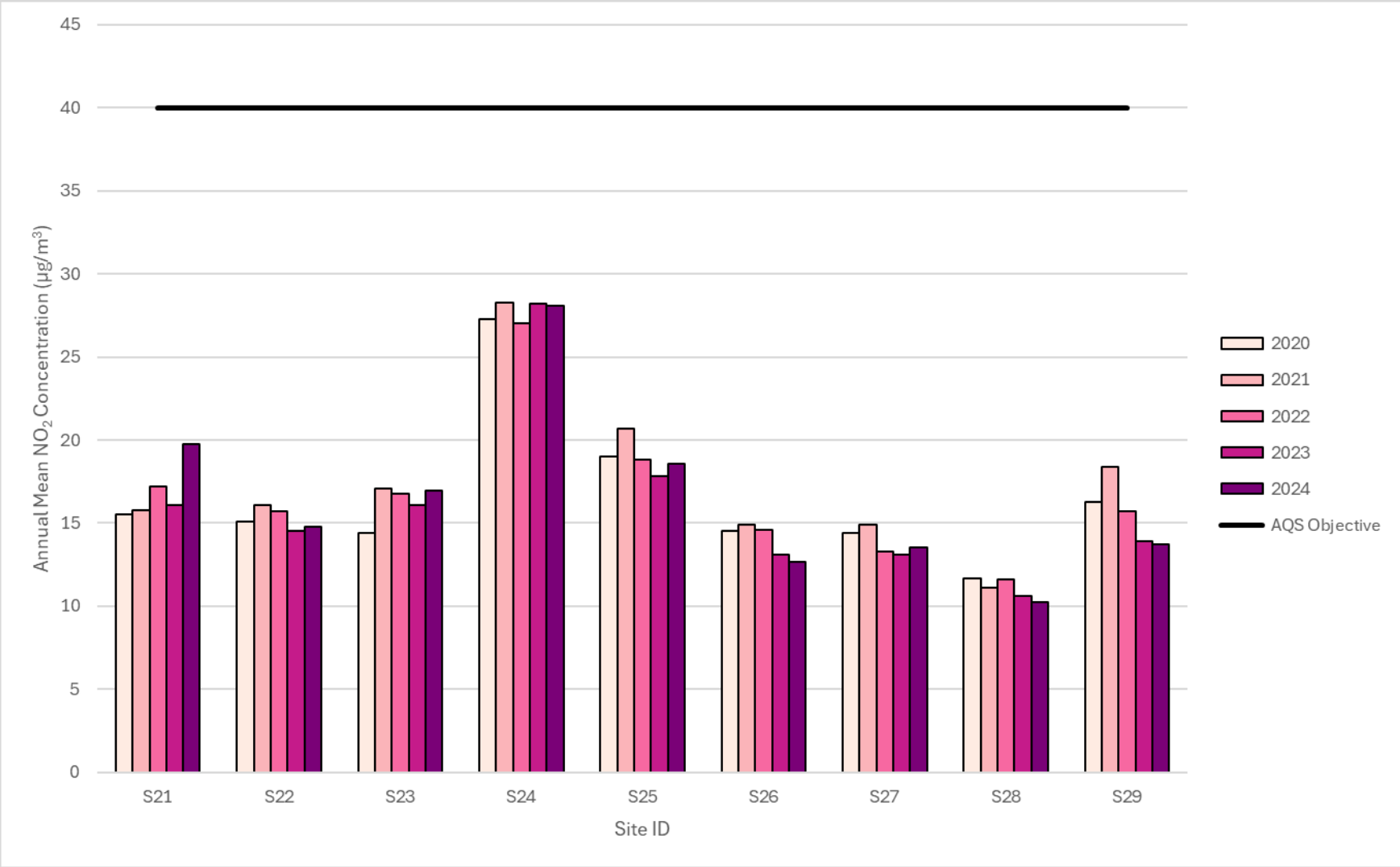


Figure A.4 – Trends in Annual Mean NO_2 Concentrations (d)

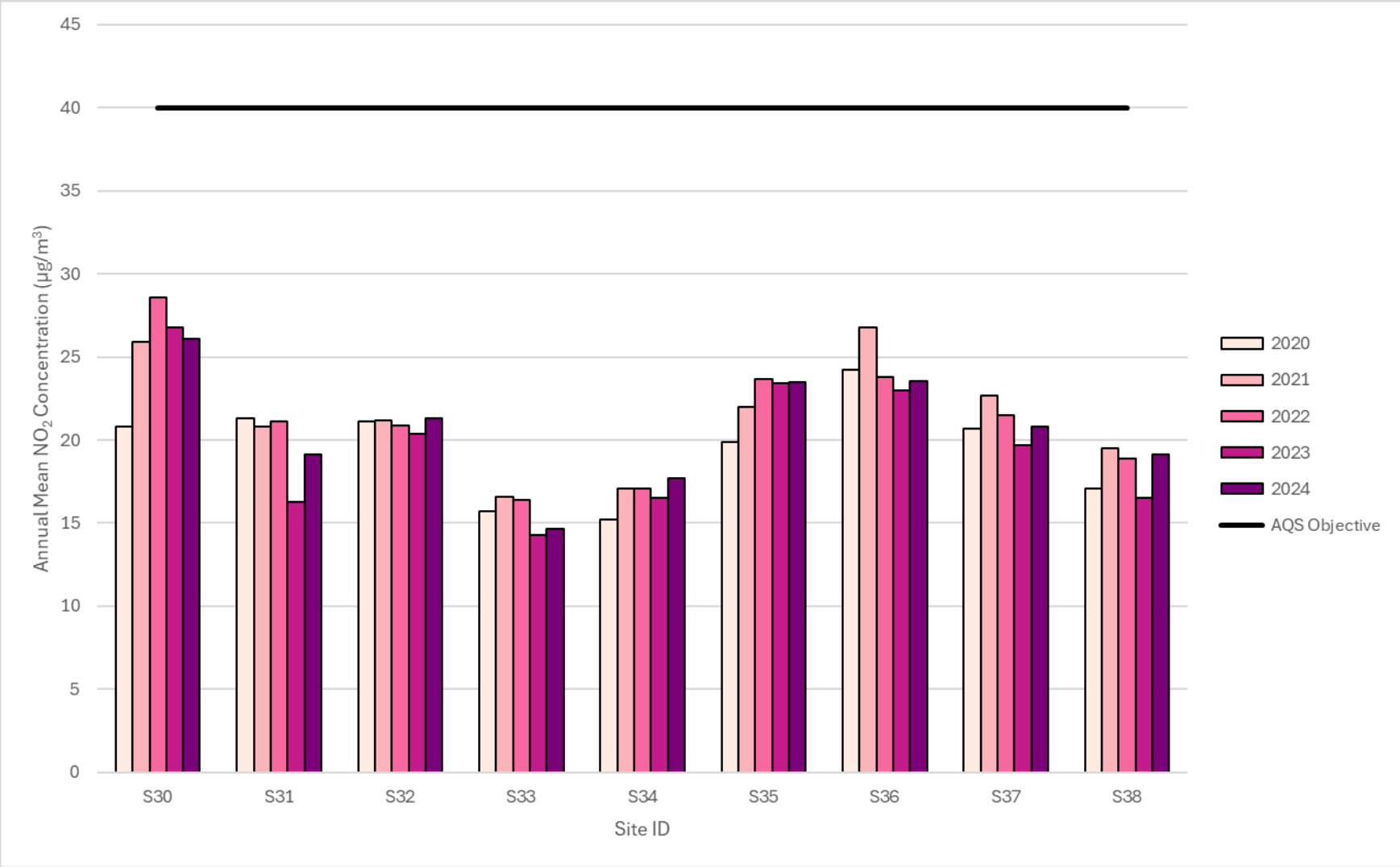


Figure A.5 – Trends in Annual Mean NO_2 Concentrations (e)

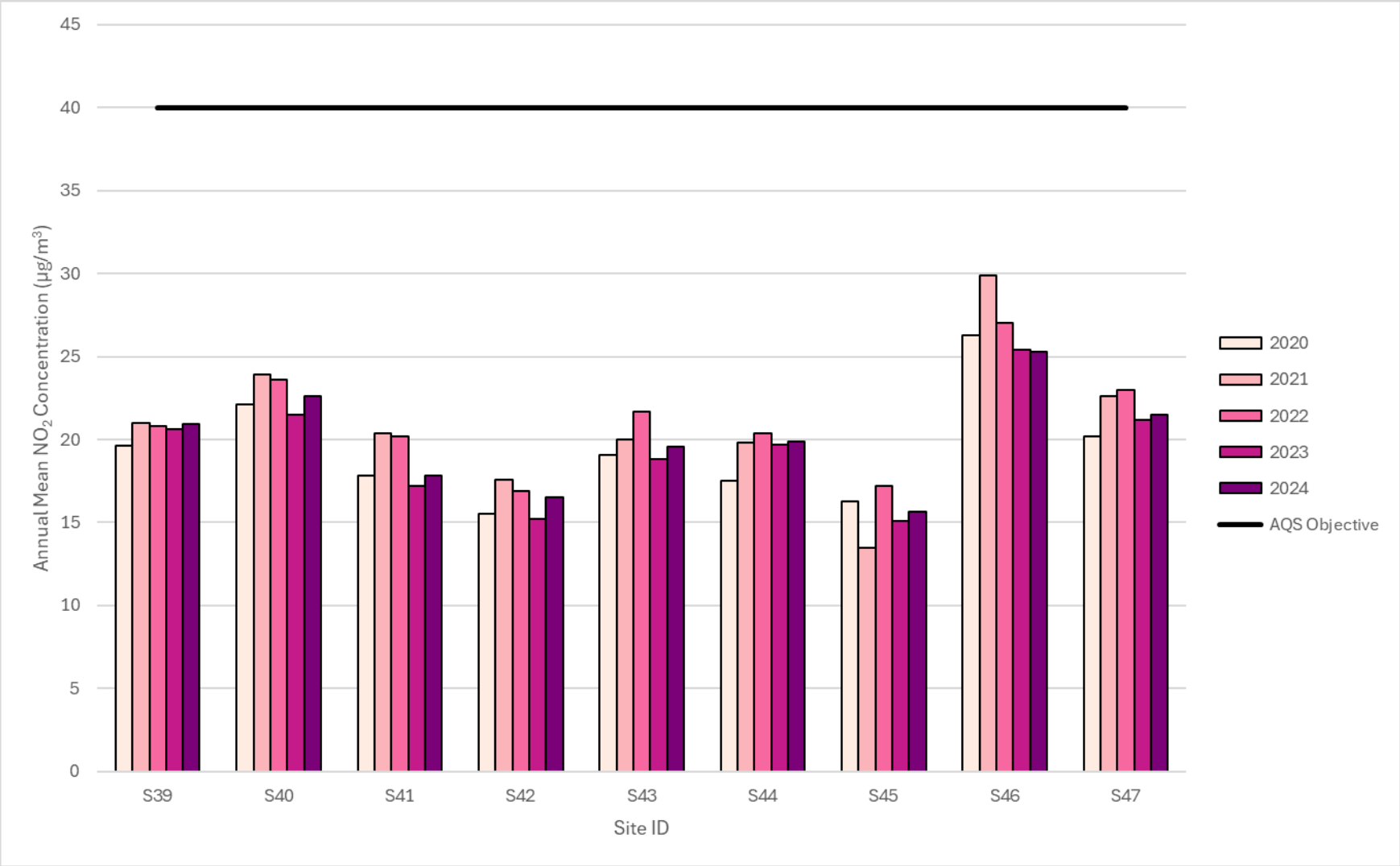


Figure A.6 – Trends in Annual Mean NO_2 Concentrations (f)

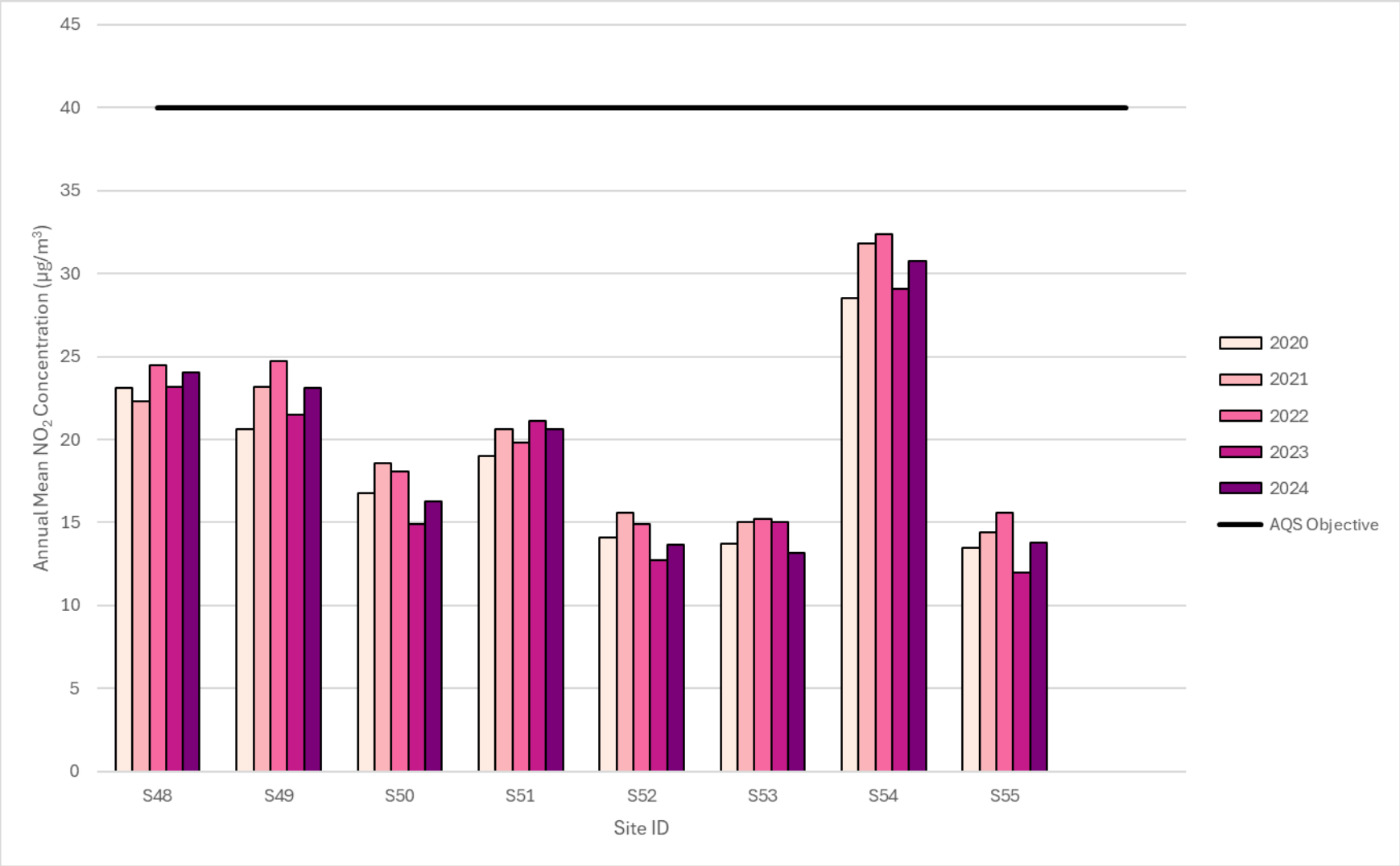
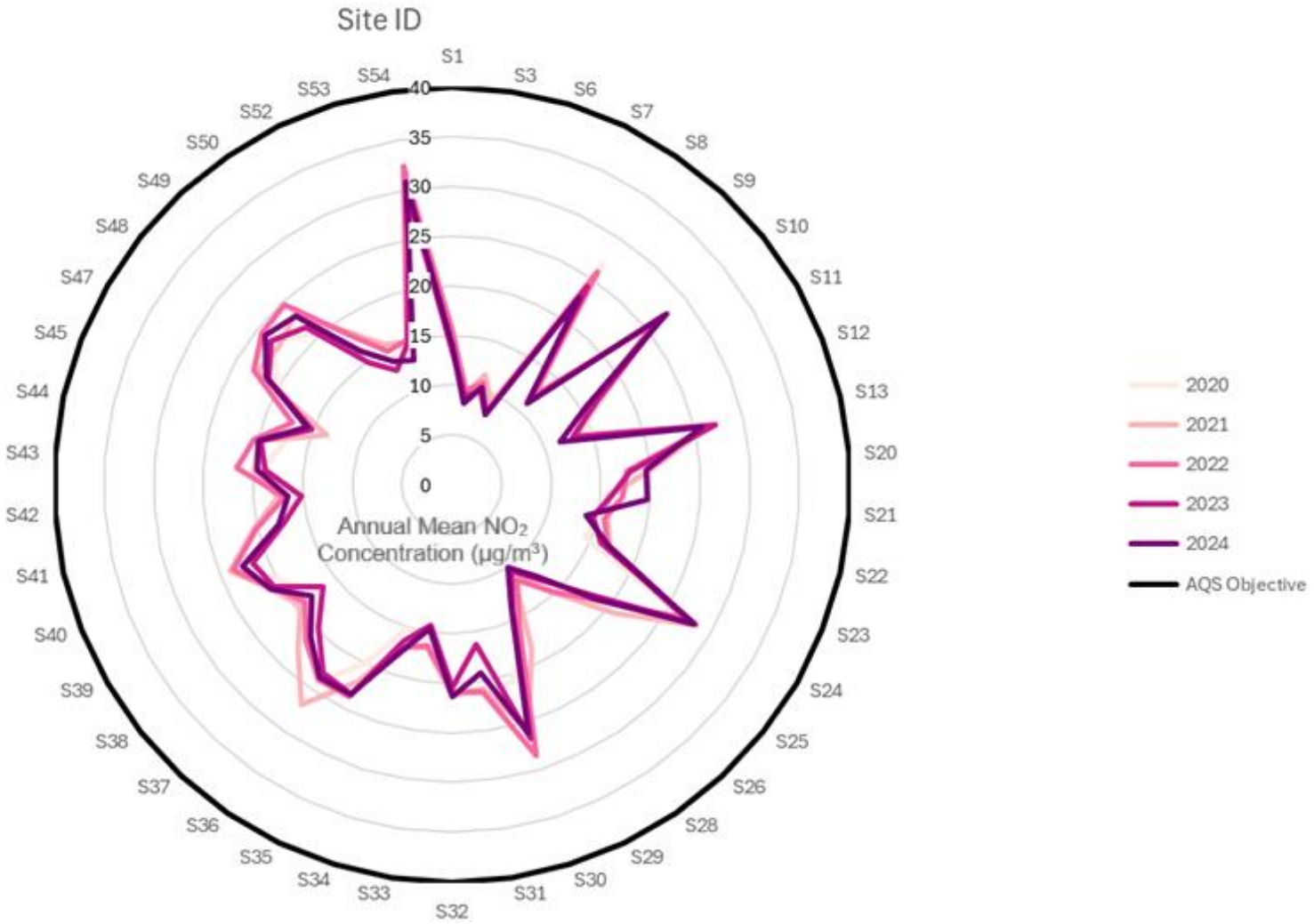


Figure A.7 – Trends in Annual Mean NO_2 Concentrations within AQMA



Appendix B: Full Monthly Diffusion Tube Results for 2024

Table B.1 – NO_2 2024 Diffusion Tube Results ($\mu g/m^3$)

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 (0.88)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
S1	449000	277178	19.2	18.1	13.8	10.1	15.6	14.5	12.9	11.9	16.2	17.6	24.2		15.8	14.0		
S2	440416	284401	42.6	44.7	35.5	30.7	41.1		36.0	31.0	26.1	40.2	31.0		35.9	31.8		
S3	447316	276162	13.7	13.0	9.7		8.7	6.0	7.2	6.9	5.5	11.7	15.8		9.8	8.7		
S4	441131	275648	15.2	11.5	7.6		7.3	6.0	6.8	5.6	7.2	9.7	14.5		9.1	8.1		
S5	438642	274418	27.7	23.4	18.5	14.3	18.2	17.6	15.1	13.6	21.7	20.6	28.5		19.9	17.6		
S6	449671	274795	17.7	14.4	10.4	5.0	10.6	9.5	8.7	7.4	10.2	12.8	20.1		11.5	10.2		
S7	448863	272786	14.9	11.8	8.2		7.4	6.3	4.7	5.1	7.9	9.8	17.6		9.4	8.3		
S8	450138	275557	23.9	35.4	28.9	20.1	26.7		24.8	19.6	24.8	29.3	23.2		25.7	22.7		
S9	451187	275334	21.3	17.8	11.3	6.4	10.5	9.6	9.9	7.1	10.2	14.7	20.3		12.6	11.2		
S10	450069	275040	37.7	36.0	31.0	21.5	31.2	27.1	27.0	25.4	34.8	32.9	37.7		31.1	27.5		
S11	449787	275224	22.3	20.5	15.8	9.4	17.0	14.0	14.6	15.3	17.6	20.3	26.5		17.6	15.6		
S12	451445	277245	18.6	15.9	12.3			12.3	9.4	11.5	11.0	13.0			13.0	11.7		
S13	450088	276229	36.0	37.3	28.5	23.7	24.1	26.4	26.1	26.2	21.7	32.8	37.0		29.1	25.7		
S14	439450	277523	20.5	15.3	11.9	6.8	9.7	9.2	7.4	7.7	10.4	13.5	21.7		12.2	10.8		
S15	449168	275411	24.0	27.1	23.8	16.1	20.5	22.2	21.0	18.6	20.2	26.3	36.1		23.3	20.6		
S16	436867	275275	20.9	17.0	13.0	10.3	17.3	14.2	13.2	10.0	15.9	17.9	23.2		15.7	13.9		
S17	431271	266404	23.0	17.7	12.4	5.9	10.7	8.4	9.5	8.5	10.1	15.6	22.0		-	-		Triplicate Site with S17, S18 and S19 - Annual data provided for S19 only
S18	431271	266404	20.3	14.8	13.1	6.5	11.2	8.2	9.5	8.0	10.0	15.1	22.1		-	-		Triplicate Site with S17, S18 and S19 - Annual data provided for S19 only

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 (0.88)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
S19	431271	266404	18.2	16.7	13.2	6.2	11.3	9.0	8.0		11.5	14.6	16.8		12.6	11.2		Triplicate Site with S17, S18 and S19 - Annual data provided for S19 only
S20	450137	275849	26.0	29.3	26.3	15.1	22.6	15.3			25.0	23.2	33.6		24.0	21.3		
S21	451698	273273	26.2	32.0	19.9	12.4	18.8	19.3	32.9		15.6	20.9	25.0		22.3	19.7		
S22	452403	273567	19.5	20.5	19.5	11.6	16.7	15.0	14.2		15.7	17.9			16.7	14.8		
S23	452672	273633	23.2	20.2	19.3	13.0	18.4	15.2	14.9		20.0	23.2	23.9		19.1	16.9		
S24	448496	271244	39.8	36.1	25.4	29.0	31.4	28.9	25.9			29.0	40.2		31.7	28.1		
S25	448414	271175	28.3	18.2	17.9	15.6	21.3	18.0	16.9		24.7	21.7	27.1		21.0	18.6		
S26	448999	275505	18.8	21.6	14.3	7.4	14.0	12.9	12.8		12.7	17.3	11.3		14.3	12.7		
S27	449435	275543	20.9	17.0	13.9	7.6	12.3	12.3			15.2	15.6	22.8		15.3	13.5		
S28	449011	276329	16.2		11.5		10.3	10.7	9.1		10.5	14.8	14.4		12.2	10.2		
S29	449575	276540	19.5	22.4	17.7	9.1	16.0	11.8	11.8		15.7	20.3	10.9		15.5	13.7		
S30	451107	275838	29.8	35.0	31.0	23.1	30.9	25.7	22.2		27.8	34.4	35.2		29.5	26.1		
S31	450848	275849		25.7	18.4	14.6	22.8	17.7	18.2		20.5	24.8	32.0		21.6	19.1		
S32	450750	275547	33.5	21.8	22.5	18.8	23.5	21.0	19.2		23.8	24.5	32.2		24.1	21.3		
S33	450510	275355	27.7		14.5	9.8	15.0	13.9	14.6		13.3	20.2	20.0		16.6	14.7		
S34	450405	275329	28.0	24.2	19.1	13.8	19.4	16.1	14.7		15.9	20.1	28.9		20.0	17.7		
S35	450444	275236	30.6	32.9	24.6	19.2	22.6	25.3	23.8		22.3	29.9	34.4		26.6	23.5		
S36	450870	275043	32.1	27.3	20.2	21.9	23.8	23.9	23.8		26.0	31.1	36.2		26.6	23.6		
S37	450897	275059	27.3	30.1	21.6	20.7	23.4	21.3	19.3		26.2	19.6	26.0		23.6	20.8		
S38	451868	275501	29.0	23.4	17.5	15.1	21.0	18.1	16.8			21.7	32.0		21.6	19.1		
S39	450852	275116	31.2	29.4	23.0	18.3	23.2	21.5	22.4		22.8	23.2	21.7		23.7	20.9		
S40	450181	275029	30.3	29.0	22.3	20.3	26.8	24.9	24.9		22.8	26.8	27.6		25.6	22.6		
S41	450010	274998	25.6	19.5	20.7	16.2	21.8	18.7	18.9		18.8	22.7	18.8		20.2	17.8		
S42	448855	274352	25.6	23.1	18.7	13.1	18.6	13.4	13.9		14.5	19.1	26.4		18.6	16.5		
S43	450162	274898	27.7	21.2	19.9	15.8	23.2	21.0	21.1		15.6	26.1	29.8		22.1	19.6		
S44	453394	273633	25.0	19.5	17.4	16.5	25.5	18.9	16.9		22.1	32.3	30.8		22.5	19.9		

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 (0.88)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
S45	442963	277071	13.5	12.9		12.7	16.4	15.8	15.8		15.2	18.2	38.6		17.7	15.6		
S46	437555	274561	36.8	29.8	27.3	25.4	28.1	23.6	21.6		25.5	29.4	38.1		28.6	25.3		
S47	450445	275495	22.0	17.6	22.4	16.5	26.6	23.4	30.8		25.7	23.6	34.0		24.3	21.5		
S48	450304	275314	33.9	36.7	27.2	21.3	24.3	25.5	21.8		22.0	27.5	31.7		27.2	24.1		
S49	450864	274896	30.6	27.9	24.5	20.8	25.8	24.8	23.0		28.4		29.1		26.1	23.1		
S50	448169	273625	23.8	17.0	18.3	12.5	19.1	17.2	16.0		17.1	17.8	24.9		18.4	16.3		
S51	443433	279208	33.5	27.1		14.2	22.2	21.9	16.0		14.7	27.6	32.4		23.3	20.6		
S52	448537	271195	8.5	20.2	15.3	11.2	15.4	13.0	13.7		14.4	18.6	24.3		15.5	13.7		
S53	448361	271334	13.2	18.6	14.6	9.1	16.7	13.1	12.5		17.3	20.7	12.6		14.8	13.1		
S54	450269	274998	38.3	39.6	33.8	23.2	33.7	36.9	29.1		29.8	39.5	43.6		34.8	30.8		
S55	445004	281330	19.5	18.8	13.6	9.2	14.7	11.6	12.9			17.2	22.8		15.6	13.8		

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

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

☒ **Local bias adjustment factor used.**

☐ **National bias adjustment factor used.**

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

☒ **RBC confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System**.

Notes:

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

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

See Appendix C for details on bias adjustment and annualisation.

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

New or Changed Sources Identified Within Rugby Borough Council During 2024

RBC has not identified any new sources relating to air quality within the reporting year of 2024. Through the planning process, RBC considers the potential air quality impacts from new developments within RBC. These are detailed in Appendix F.

Additional Air Quality Works Undertaken by Rugby Borough Council During 2024

RBC has published a draft AQAP in September 2024, which sets out measures to ensure compliance is maintained within the AQMA for the period 2024-2028.

Airly PM monitors have been installed and were operational though 2024. Data from these monitors can be found in Appendix G.

QA/QC of Diffusion Tube Monitoring

Diffusion tube monitoring has been undertaken in accordance with the Defra Calendar.

RBC's NO2 diffusion tubes are supplied and analysed by SOCOTEC Didcot using the 50% triethanolamine (TEA) in Acetone method. This method conforms to the guidelines set out in Defra's 'Diffusion Tubes for Ambient NO2 Monitoring: Practical Guidance' document.

SOCOTEC Didcot participates in the AIR NO_2 PT scheme[11]. This scheme forms an integral part of the UK NO_2 Network's QA/QC and is a useful tool in assessing the analytical performance of those laboratories supplying diffusion tubes to Local Authorities for use in the context of LAQM. In the AIR PT intercomparison scheme for comparing spiked NO_2 tubes, SOCOTEC currently holds the highest rank of a Satisfactory laboratory.

[11] LGC (2023) Summary of Laboratory Performance in AIR NO_2 Proficiency Testing Scheme (September 2021 – October 2023) Available at: https://laqm.defra.gov.uk/wp-content/uploads/2023/11/LAQM-NO2-Performance-data_Up-to-Oct-2023_V1_Final.pdf

Diffusion Tube Annualisation

51 out of the 53 diffusion tube monitoring locations within RBC recorded data capture rates of above 75% except for S12 and S28 which had a data capture of 65.5% and 63.6% respectively. This is in part due to erroneous data being removed. These sites has been annualised accordingly. Annualisation requires the use of continuous background monitors with a data capture of 85% or greater. Four continuous monitoring background sites from the Defra Automatic Urban and Rural Network (AURN) with sufficient data capture to be used for annualisation have been selected. These are Coventry Allesley, Leamington Spa, Leicester University and Northampton Spring Park.

Table C.1 – Annualisation Summary (concentrations presented in µg/m^3)

Site ID	Annualisation Factor Leamington Spa	Annualisation Factor Coventry Allesley	Annualisation Factor Northampton Spring Park	Annualisation Factor Leicester University	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean
S12	1.0251	1.0027	1.0030	1.0280	1.0147	13.0	13.2
S28	0.9532	0.9494	0.9177	0.9666	0.9467	12.2	11.5

Diffusion Tube Bias Adjustment Factors

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

The diffusion tube data presented within the 2025 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 NOx/NO2 continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

A national bias adjustment factor was obtained from the national Diffusion Tube Bias Adjustment Factors Spreadsheet for April 2025 (04/25). Based on the analytical laboratory (SOCOTEC Didcot) and tube preparation method (50%TEA/Acetone) a national bias adjustment factor of 0.78 was derived for 2024.

A local bias adjustment factor was also calculated from the triplicate co-location of diffusion tubes (S17, S18 and S19) alongside the AURN Urban Traffic monitoring station at Leamington Spa Rugby Road. The AURN monitoring station is managed by Defra and is outside of the control of Rugby Borough Council. The local bias adjustment factor was calculated as 0.88. The factor was calculated as per LAQM.TG22 guidance, using the Defra Diffusion Tube Data Processing Tool v4.0. Details of this calculation can be found in Table C.3.

RBC have applied a local bias adjustment factor of 0.88 to the 2024 monitoring data as this is more representative of the area. In addition, the local factor provides a more conservative estimate of NO_2 concentrations within the borough. A summary of bias adjustment factors used by RBC over the past five years is presented in Table C.2.

Table C.2 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	Local	-	0.88
2023	Local	-	0.81
2022	National	03/23	0.76
2021	National	03/22	0.78
2020	National	03/21	0.77

Table C.3 – 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	0.88 (0.81 – 0.97)	-	-	-	-
Bias Factor B	13% (3% - 24%)	-	-	-	-
Diffusion Tube Mean (µg/m^3)	12.6	-	-	-	-

	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
Mean CV (Precision)	7.0%	-	-	-	-
Automatic Mean (µg/m^3)	11.1	-	-	-	-
Data Capture	99%	-	-	-	-
Adjusted Tube Mean (µg/m^3)	11 (10 – 12)	-	-	-	-

Notes:

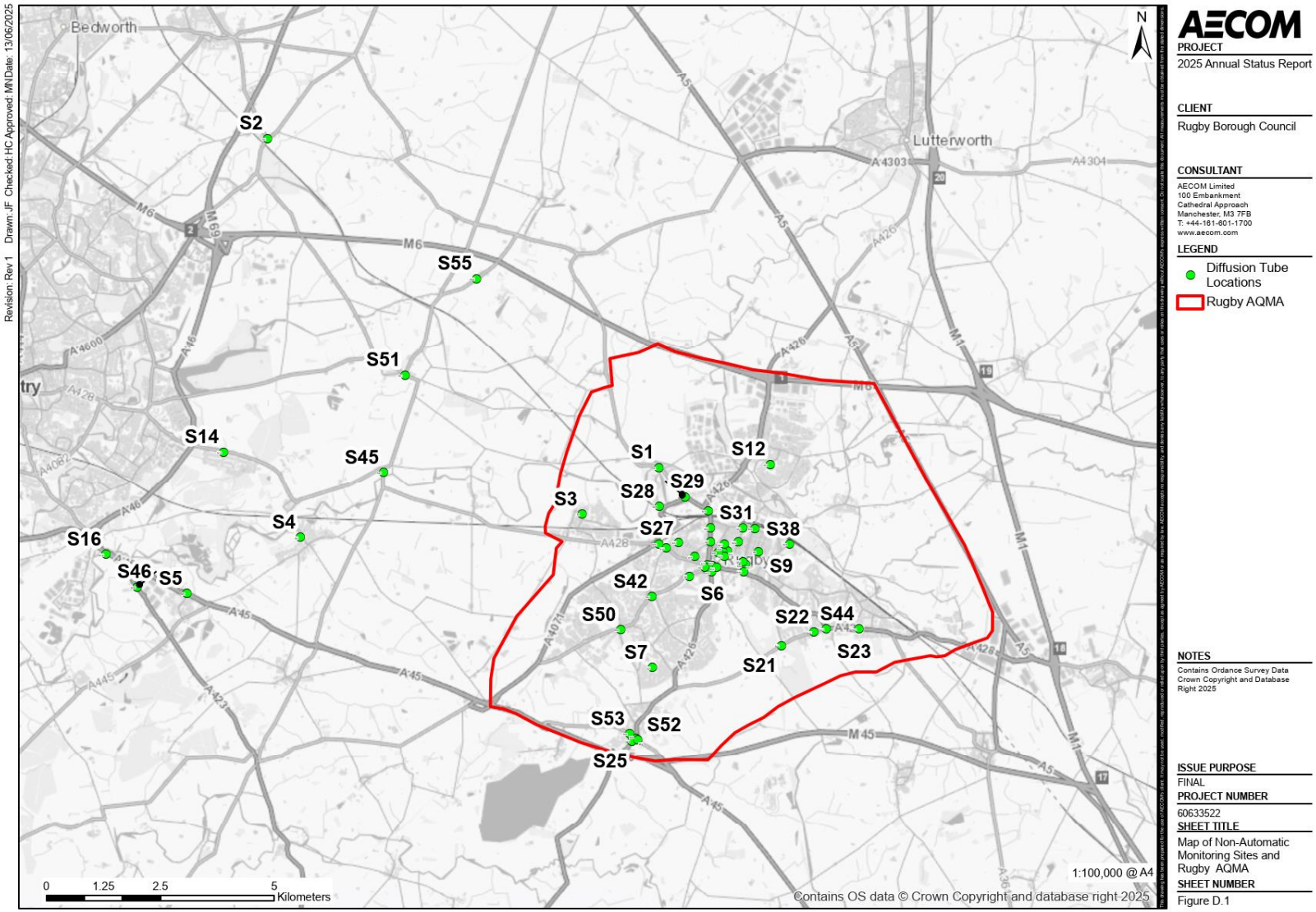
A single local bias adjustment factor has been used to bias adjust the 2024 diffusion tube results.

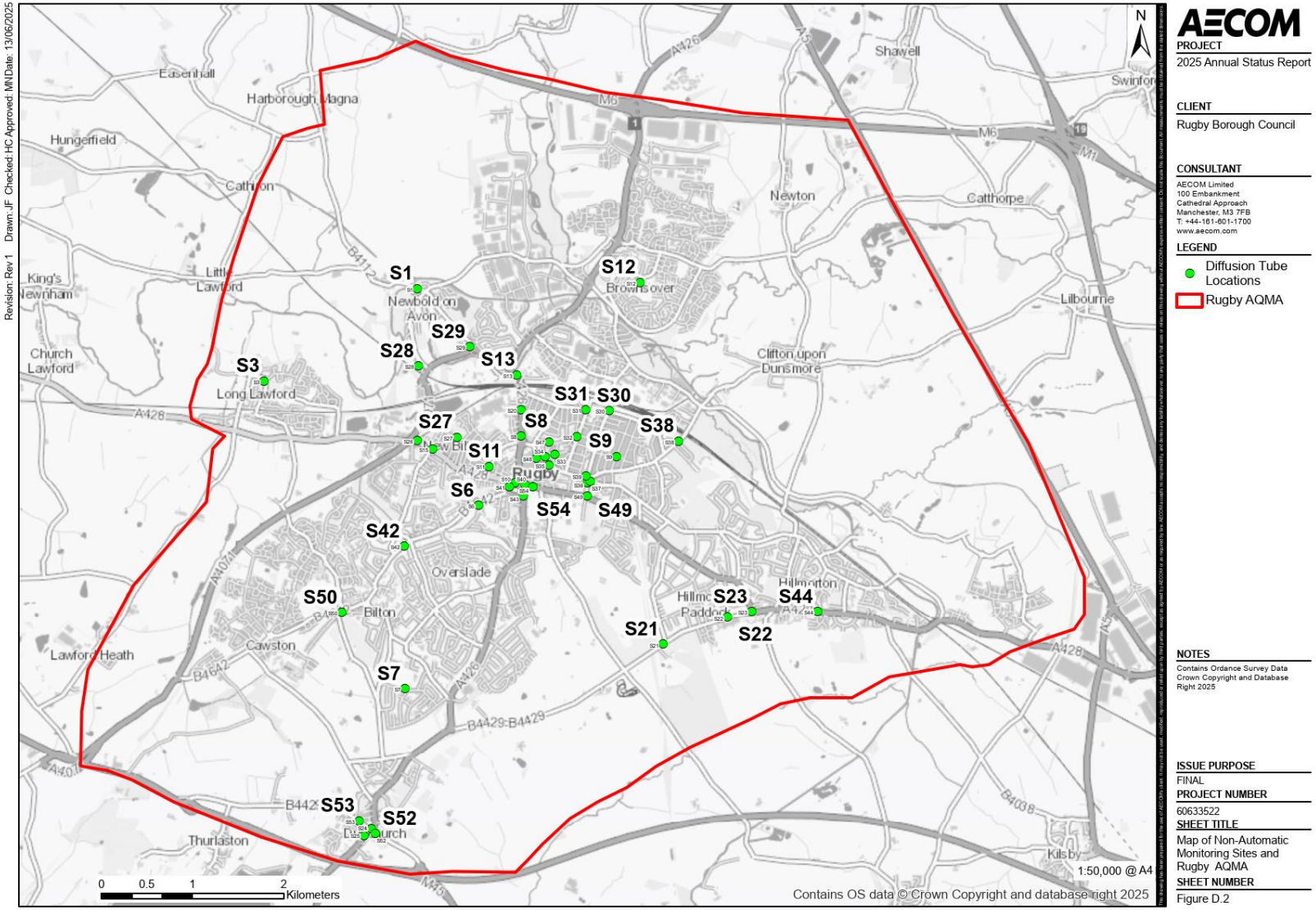
NO_2 Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO_2 concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO_2 fall-off with distance calculator available on the LAQM Support website. No diffusion tube NO_2 monitoring locations within RBC required distance correction during 2023 given the low concentrations monitored.

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

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




Revision: Rev 1 Drawn: JF Checked: HC Approved: MW Date: 13/06/2025
N
Easenhall
Harborough Magna
Hungerfield
Cathiron
King's Newnham
Little Lawford
Church Lawford
Long Lawford
Newbold on Avon
Brownsover
Shawell
Swinford
Newton
Catthorpe
Lilbourne
Clifton upon Dunsmore
Rugby
Overslade
Bilton
Cawston
Lawford Heath
Hillmorton
Paddock
Thurlaston
Kilsby
A426
M6
M1
A428
A5
A4071
B4642
B4429
B4038
S1
S3
S6
S7
S8
S9
S11
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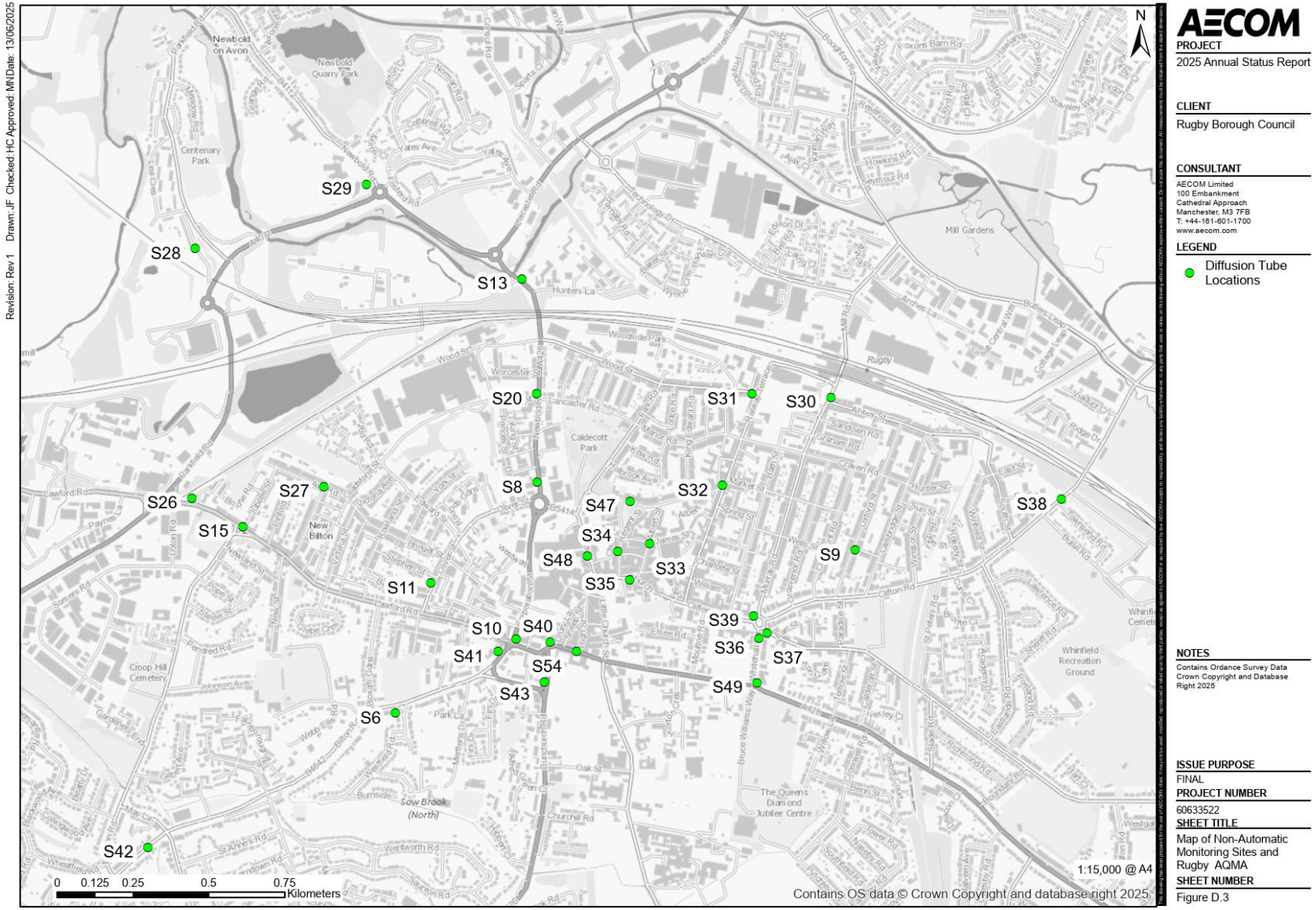
PROJECT NUMBER
60633522
SHEET TITLE
Map of Non-Automatic Monitoring Sites and Rugby AQMA
SHEET NUMBER
Figure D.2



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PROJECT NUMBER
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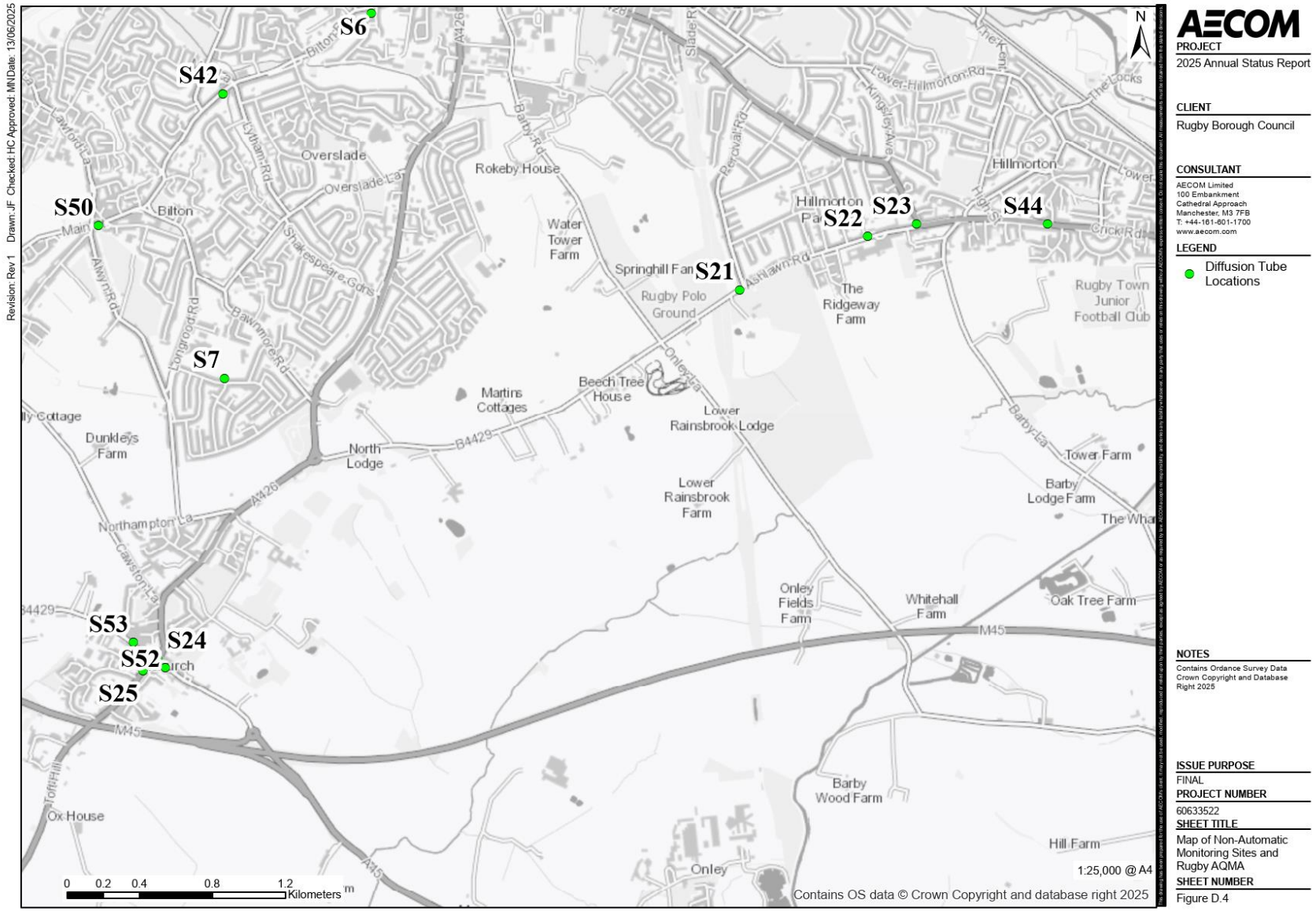
SHEET TITLE
Map of Non-Automatic Monitoring Sites and Rugby AQMA

SHEET NUMBER
Figure D.3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S6
S42
S50
S7
S53
S24
S52
S25
S22
S23
S44
S21
Bilton
Overslade
Rokeby House
Water Tower Farm
Springhill Farm
Rugby Polo Ground
The Ridgeway Farm
Hillmorton
Rugby Town Junior Football Club
Martins Cottages
Beech Tree House
Lower Rainsbrook Lodge
Lower Rainsbrook Farm
North Lodge
Dunkleys Farm
Barby Lodge Farm
Tower Farm
Onley Fields Farm
Whitehall Farm
Oak Tree Farm
Barby Wood Farm
Hill Farm
Onley
Ox House
B4429
A426
M45
A45
Main
Lawford La
Lytham Rd
Shakespeare Gdns
Longwood Rd
Bawnmore Rd
Ashlawn Rd
Barby Rd
Percival Rd
Lower Hillmorton Rd
Kingsley Ave
The Locks
Cricket Rd
Onley La
Barby La
Northampton La
Cawston La
Toft Hill
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Map of Non-Automatic Monitoring Sites and Rugby AQMA
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Figure D.4

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England[12]

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

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

Appendix F: Summary of Planning Applications

The most significant planning applications and allocations in the Local Plan are listed below:

1. Coton Park East – An allocation in the Local Plan for around 800 dwellings and 7.5 ha of employment land. Both housing and employment applications approved or resolved to approve on parts of the site.
2. Long Lawford 143 dwellings off the Coventry Road. Granted on appeal September 2021. Site clearance works recently commenced.
3. Gala & Cemex House, Evreux Way – An Outline application for 6255 square metres of retail and an additional 785 square metres of A1/A2/A3/A4/A5 has been approved but not yet implemented. McDonald's drive thru and restaurant approved, built and now operational on part of the site.
4. R22/0657 Rugby Central, North Street – Additional retail and 210 residential units resolved to grant permission in March 2023.
5. Land to the north of Ashlawn Road – allowed on appeal decision for development of up to 860 dwellings and associated primary school. Planning Appeal Reference: APP/E3715/W/16/3147448. Building works associated with the residential properties commenced across the site in several phases.
6. Urban Expansion South West of Rugby – an allocation in the Local Plan for around 5,000 residential dwellings with associated infrastructure comprising of link road, health/community facility, and employment uses, including a local centre, together with primary and secondary schools. As part of this allocation, Miller Homes, Coventry Road, Cawston c150 dwellings approved and occupied. L&Q, Coventry Road, Cawston 210 dwellings and primary school, approved. First phase of industrial units under construction on the employment element adjacent to M45/A45 junction – allocation will provide up to 35 hectares of employment land. This Rugby South West site also covers the development proposal for Ashlawn Road.

The following developments are either under construction or were completed / occupied during 2024:

1. Rugby Radio Station (SUE) – Urban extension to Rugby providing up to 6,200 dwellings, up to 130,000 m^2 of space for various land uses, including mixed use district centre, construction works are underway on all 3 Phases. The Secondary School

opened in September 2021. David Lloyd Fitness Centre, inc courts and swimming pools, approved 01/09/2020. Application for 7810 sqm of employment approved in March 2023.

2. Rugby Gateway (Eden Park) – Outline application for up to 1,300 residential units and employment zone. Phases 1, 2 & 4 and the employment zone has been completed and occupied. Phase 3 for 146 dwellings and the primary school have received planning permission and work has commenced. Application for remaining residential phases, 555 dwellings currently pending.
3. Leicester Road/Technology Drive – permission granted for 620 dwellings. All phases have now been completed.
4. Cawston Extension – Outline planning permission granted for up to 600 homes under reference R11/0114. However, the site has been divided into four sections with four different developers. Each of the four sections have been substantially completed and occupied. The northern most section has been constructed by William Davis for 184 dwellings under reference R16/1721. The southern site has been constructed by Linden Homes for a total of 246 dwellings (from combined planning permissions of R16/1780 and R17/1885). To the east of these two sites, Redrow Homes constructed 113 dwellings (from planning permission R15/0540), whilst the furthest site to the east has been constructed by Triosquare and comprises 10 dwellings granted under combined references of R12/1947 and R16/2295 (it should be noted that these last two permissions were not part of the original outline under R11/0114). In total, these four sections comprise 553 dwellings, substantially completed, and mainly occupied.

Appendix G: Supplementary Air Monitoring

RBC conducted non-standard indicative monitoring of $PM_{2.5}$ during 2024 with the monitoring data shown in Table G.1. The data shows the annual concentrations of $PM_{2.5}$ at all sites are significantly below the AQS objective of 20 µg/m^3 and the 2040 target of 10 µg/m^3. Additionally, there are number of hourly $PM_{2.5}$ concentrations greater than 20 µg/m^3, these are noted in Table G.2.

Table G.1 – Airly - 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 2024 (%) (2)	2020	2021	2022	2023	2024
Ashlawn School	452399	273512	-	99.5	99.5	-	-	-	-	8.3
Henry Hinde Junior School	447938	274680	-	56.3	56.3	-	-	-	-	4.6
Houlton School	455309	274634	-	99.5	99.5	-	-	-	-	5.9
Rugby free primary School	452088	278470	-	30.6	30.6	-	-	-	-	5.5
Rugby Town Hall	450194	275490	-	99.5	99.5	-	-	-	-	8.0
St Andrew's Benn - front entrance	451532	275704	-	98.9	98.9	-	-	-	-	7.9
St Andrew's Benn - rear entrance	451506	275647	-	99.5	99.5	-	-	-	-	7.1

Table G.2 – Airly - 1-Hour Mean $PM_{2.5}$ Monitoring Results, Number of 1-Hour Means > 20µg/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 2024 (%) (2)	2020	2021	2022	2023	2024
Ashlawn school	452399	273512	-	99.5	99.5	-	-	-	-	32.9 (3)
Henry Hinde Junior School	447938	274680	-	56.3	56.3	-	-	-	-	75.9 (2)
Houlton school	455309	274634	-	99.5	99.5	-	-	-	-	25.0 (12)
Rugby free primary school	452088	278470	-	30.6	30.6	-	-	-	-	52.6 (4)
Rugby Town Hall	450194	275490	-	99.5	99.5	-	-	-	-	38.9 (26)
St Andrew's Benn - front entrance	451532	275704	-	98.9	98.9	-	-	-	-	29.3 (23)
St Andrew's Benn - rear entrance	451506	275647	-	99.5	99.5	-	-	-	-	27.4 (21)

Appendix H: AQMA Revocation Assessment

Introduction

This screening assessment sets out the evidence relied upon by Rugby Borough Council ("the Council or RBC") as it seeks to revoke the Rugby Air Quality Management Area ("AQMA"). Consideration will be given to:

- The monitoring data obtained over a number of years within the AQMA;
- The projected roadside NO_2 concentration;
- Local and national trends in NO_2 emissions; and
- Local and regional factors that may impact on the AQMA.

Part IV of the Environment Act 1995 (as amended 2021) requires Local Authorities to review air quality in its area and assess whether national objective levels will be achieved. Where it has been shown that the objectives will not be achieved Local Authorities must declare an AQMA and put an Air Quality Action Plan (AQAP) in place to bring air quality within acceptable levels.

Where it can be subsequently demonstrated that air quality objectives are being and will continue to be met a Local Authority can revoke an AQMA by Order under the Environment Act 1995 (as amended 2021).

The Rugby AQMA was declared in 2004 following exceedance of the annual mean nitrogen dioxide (NO_2) air quality standard objective of 40 $\mu g/m^3$ linked to emissions from road traffic. Since that time, monitoring has shown a continued reduction in pollutant concentrations, which have now been consistently below the national objectives for five years.

National, regional and local policies have influenced the reduction in polluting emissions within the AQMA and it is reasonable to expect that further reductions will be achieved through the increasing use of ultra-low and zero emission vehicles.

In line with LAQM.TG22, "in the instance that 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." Having considered the historical monitoring

data at sites within the Council, national trends in emissions and any likely impacts on the air quality within the AQMA, the Council is satisfied that the AQMA can be revoked.

Review & Assessment

Part IV of the Environment Act 1995 (as amended 2021) (the Act) introduced the Local Air Quality Management regime that places a legal duty on local authorities to regularly review and assess air quality in their areas against AQS objectives. The AQS objectives for England are set out in the Air Quality (England) Regulations 2000 and the Air Quality (England) (Amendment) Regulations 2002 and are shown in Table E.1 of the RBC 2025 Annual Status Report (ASR).

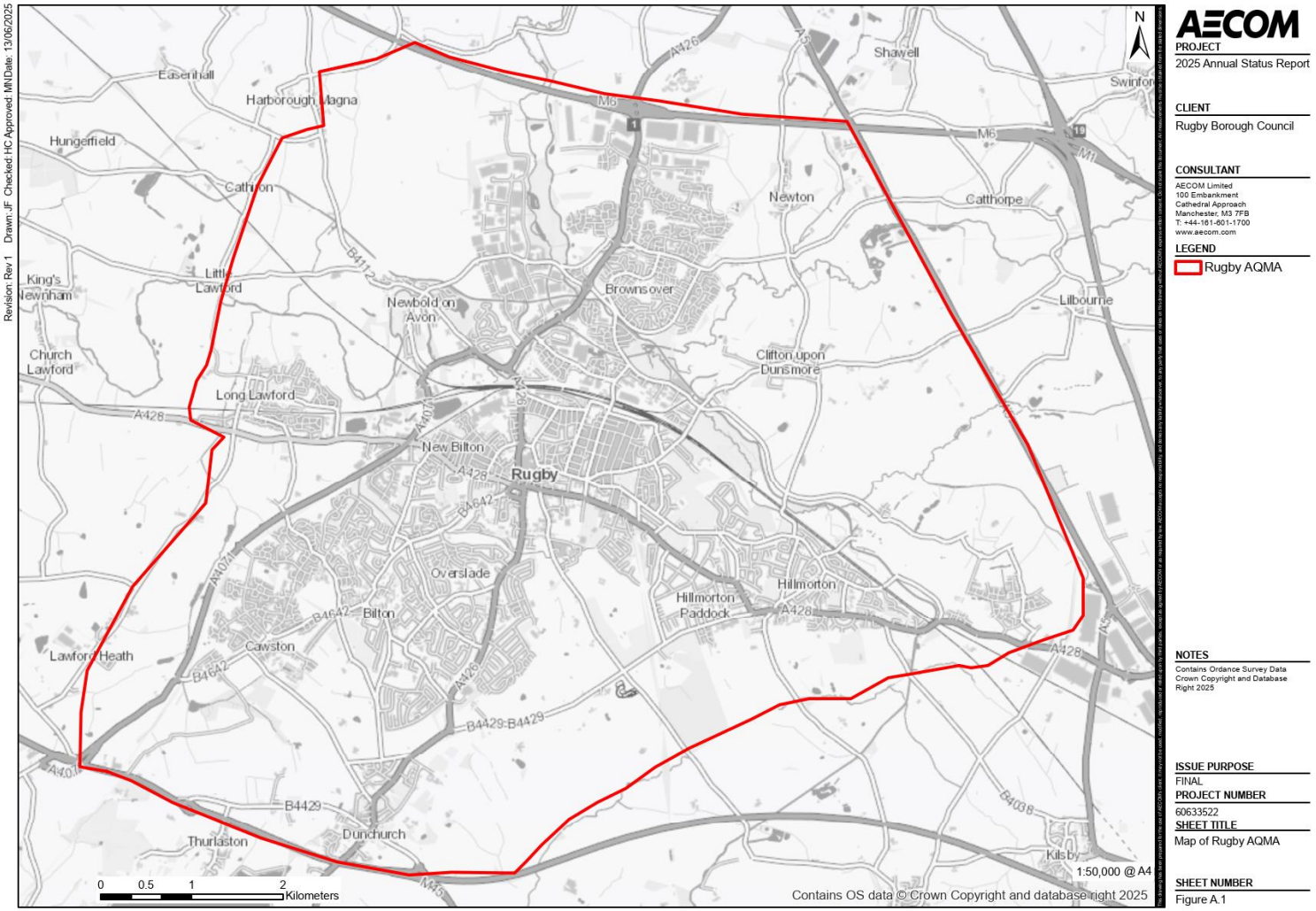
Local authorities must declare an AQMA where any of the AQS objectives are exceeded and subsequently set out the measures they intend to put in place to secure compliance with the AQS objectives under an AQAP. With effective implementation of the Action Plan and national policies aimed at reducing the emission of pollutants it is expected that the air quality within AQMAs should improve to a point that concentrations will remain below the AQS objectives. Revocation of an AQMA can be formally declared by Order under section 83 of the Environment Act.

Each year an ASR must be prepared by local authorities detailing the strategies employed to improve air quality and any progress that has been made.

Rugby AQMA

The Rugby AQMA was declared in 2004 to address traffic related NO_2 concentrations in excess of the annual mean AQS objective. The AQMA encompasses the whole urban area of Rugby bounded by the southern boundary with Daventry District Council, A5, M6, minor roads to the west of Long Lawford, A45 and M45. The extent of the AQMA, as declared under the original order, is demonstrated in Figure H. 1.

Figure H. 1 - Rugby AQMA



Revoking an AQMA: The Legal Framework & Guidance

The Environment Act 1995 (as amended 2021)

Section 83 (2b) of the Environment Act (1995) states that an AQMA:

"…..may, as a result of a subsequent air quality review, be revoked by such an order, if it appears on that subsequent air quality review that the air quality standards and objectives are being achieved, and are likely throughout the relevant period to be achieved, within the designated area".

Statutory Guidance

Guidance on the requirements for revoking an AQMA are set out in Defra's statutory guidance LAQM.PG22 and LAQM.TG22.

PG22 states that:

- *"Authorities wishing to revoke or reduce an AQMA can do so following review. For revocation this should demonstrate that air quality objectives are being met and will continue to do so. In other words they should have confidence that the improvements will be sustained. Further information is provided in the Technical Guidance, but typically this is after three years or more compliance. It is not advisable for the revocation of an AQMA to be based solely upon compliance in a year not representative of long-term trends. For example, compliance being reached in 2020 may not be representative of long-term trends in pollutant concentrations due to the change in activity observed across the UK as a result of COVID-19. Where 2020 is one of many consecutive years of compliance, this may be considered for revocation. If authorities wish to make any changes to AQMAs, whether declaration, amendment or revocation, based upon 2020 data, please contact the LAQM helpdesk to discuss your approach.*
- *Where an Order is revised, a copy of the revocation or amendment Order should be submitted to Defra via the LAQM portal and other statutory consultees and made publicly available to ensure the public and local businesses are aware of the situation. It is expected that the local authority will take the relevant action imposed by the Order within four months following receipt of comments from Defra.*
- *Following a revocation, from 2023 (where this would result in that local authority no longer having any AQMA) the local authority should put in place a local air quality*

strategy (paragraph 2.15) to ensure air quality remains a high profile issue and to ensure it is able to respond quickly should there be any deterioration in condition."

TG22 goes on to state that:

- *"In most cases the decision to amend or revoke an AQMA should only be taken following a detailed study, to be appended to the ASR/APR as additional supporting technical information. A modelling study may allow compliance to be assessed over a wider geographical area than when compared to monitoring alone. This should set out in detail all the available information used to reach the decision, with the same degree of confidence as was provided for the original declaration. If the conclusions of the study are suitably robust to allow an assessment of compliance to be determined, either an amendment or revocation can be taken forward. Due to the inherent uncertainties of dispersion modelling, consideration should be given to predicted concentrations being 10% below the relevant objective before an amendment or revocation of an AQMA is completed.*
- *It is not advisable for the revocation of an AQMA to be based solely upon compliance in a year not representative of long-term trends. For example, compliance being reached in 2020 may not be representative of long-term trends in pollutant concentrations due to the change in activity observed across the UK as a result of COVID-19 and associated lock down measures. Where 2020 is one of many consecutive years of compliance, this may be considered for revocation.*
- *However, 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.*
- *However, pollutant concentrations may vary significantly from one year to the next, due to the influence of meteorological conditions, and it is important that authorities avoid cycling between declaring, revoking and declaring again, due simply to these variations. Therefore, before revoking an AQMA on the basis of measured pollutant concentrations, the authority therefore needs to be reasonably certain that any future exceedances (that might occur in more adverse meteorological conditions) are unlikely. For this reason, it is expected that authorities will need to consider measurements carried out over several years or more, national trends in emissions, as well as local factors that may affect the AQMA, including measures introduced as part of an Air Quality Action Plan, together with information from national monitoring on high and low pollution years.*

- *The revocation of an AQMA should be considered following three consecutive years of compliance with the relevant objective as evidenced through monitoring. Where NO_2 monitoring is completed using diffusion tubes, to account for the inherent uncertainty associated with the monitoring method, it is recommended that revocation of an AQMA should be considered following three consecutive years of annual mean NO_2 concentrations being lower than 36 µg/m^3 (i.e. within 10% of the annual mean NO_2 objective). There should not be any declared AQMAs for which compliance with the relevant objective has been achieved for a consecutive five-year period."*

Therefore, where compelling evidence exists, an AQMA can be revoked following at least three consecutive years of compliance with the objective without the need for detailed modelling as would traditionally have been required under the technical guidance. That is to say that NO_2 concentrations monitored using diffusion tubes should have been lower than 36 µg/m^3 to account for the uncertainty inherent with the method for a period of three years or more, acknowledging wider trends or new sources that might impact continued compliance (Paragraph 3.57 in LAQM.TG22).

This report compiles the evidence required to revoke the Rugby AQMA.

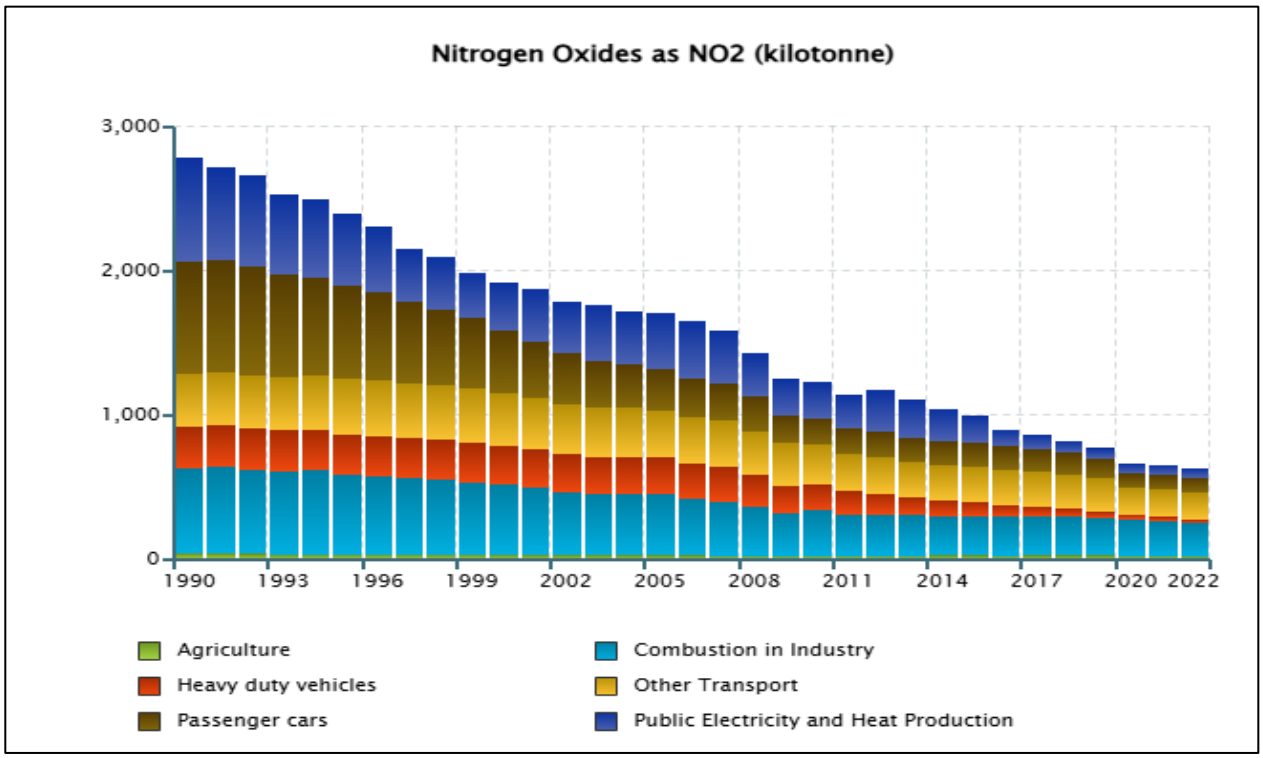
National Influence

National strategies, policies and plans have and will continue to influence local polluting emissions. Total UK emissions of NO_x fell by over 66% between 1990 and 2021. Figure H.1 shows that total NO_x emissions have decreased substantially over this period and are now less than one third of the total emissions in 1990. Emissions from several specific sources, notably public energy and heat production, passenger cars and heavy-duty vehicles, have also shown substantial decreases over the same period[13], as shown in Figure H. 2[14].

[13] Defra, September 2023, 'Air Pollution in the UK 2022 Report'

[14] NAEI, 2022, 'Nitrogen Oxides. Time Series Graph'

Figure H. 2 - Estimated Annual UK Emissions of Nitrogen Oxides (kt), 1990 – 2022 (Source: NAEI 2022)



Future influence on emissions is considered in a revised Clean Air Strategy[15] with a major transport emission objective that states:

"*We will end the sale of new conventional petrol and diesel cars and vans by 2040. We will position the UK as the best place in the world to develop, manufacture and use zero exhaust emissions vehicles and, during the transition, we will ensure that the cleanest conventional vehicles are driven on our roads*"".

This transition to ultra-low and zero emission vehicles presents the largest potential for the reduction of future road traffic emissions in this AQMA. Department for Transport (DfT) road traffic forecasts[16] provide future numbers, compositions and emissions across the UK based on seven scenarios (to account for the broad range of possibilities and uncertainties in predicting up to 2060) linked to changing population, economic and social well-being and technological changes. The findings include:

- From 2025, traffic is projected to grow between 8% and 54% by 2060;

[15] Department for Transport (DfT), January 2019, 'Clean Air Strategy 2019'

[16] Department for Transport (DfT), December 2022, 'National Road Traffic Projections 2022'

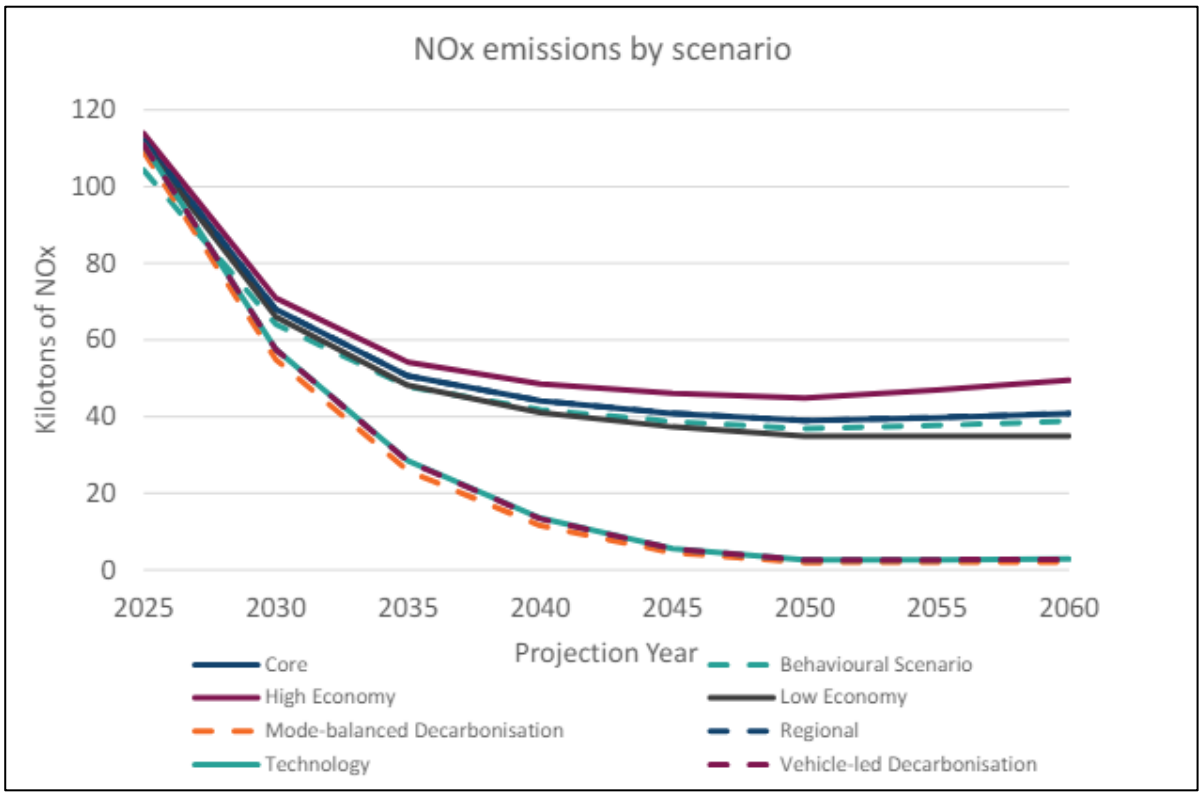
- Traffic on minor roads and A-roads is expected to grow by 21% and 20% respectively, while motorway traffic is projected to increase by 27% between 2025 and 2060;
- Between 2025 and 2050 NO_x emissions are projected to reduce by 65%, driven by the uptake of Euro 6 engines. However, as the uptake of Euro 6 engines flattens off the impact of greater travel increases NO_x by 1% between 2050 and 2060;
- Heavy Goods Vehicles (HGV) traffic is projected to have a moderate increase from 16 Billion (Bn) vehicle miles in 2025 to 18 Bn vehicle miles in 2060;
- Light Goods Vehicles (LGV) growth is stronger starting at 57 Bn vehicle miles in 2025 rising to 77 Bn by 2060; and
- Congestion (measured in delay per mile) is also projected to increase, with the average delay per mile projected to increase around 27% between 2025 and 2060. The high EV uptake scenarios reduce to almost zero by 2050 due to the electrification of the vehicle fleet.

The national transport model (NTM) produces forecasts of emissions of Carbon Dioxide (CO_2), NO_x and PM_{10} measured at the tailpipe (though this does not capture any upstream emissions produced) as shown in Figure H.3. A set of seven scenarios which explore uncertainties in demography, economic growth, regional redistribution, behavioural change, emerging technologies, and decarbonisation, have been developed for use in modelling and appraisal. The projections illustrate that a wide range of traffic growth is possible in the long term, with the scenarios suggesting an 8% to 54% increase in distance driven between 2025 and 2060, though in this context the uncertainty in these figures should be noted.

Even if this nationally predicted increase in traffic growth is realised at the local level within Rugby, associated NO_x emissions are also projected to reduce by between 61% (in DfT's High Economy Scenario) and 98% (in the Mode-balanced Decarbonisation Scenario) between 2025 and 2060, primarily due to fleet turnover and transition away from internal combustion engine vehicles, as shown in Figure H. 3[17].

[17] DfT, 2022, 'National Road Traffic Projections 2022'

Figure H. 3 - Forecast NO_x Road Traffic Emissions (kt) for England & Wales (Source: Department for Transport)



As highlighted in previous years' ASRs, COVID-19 had notable impacts on NO_2 concentrations in 2020. The Air Quality Expert Group (AQEG) has estimated that during the initial lockdown period in 2020, within urbanised areas of the UK, reductions in NO_2 annual mean concentrations were between 20 and 30% relative to pre-pandemic levels, which represents an absolute reduction of between 10 to 20 µg/m^3 if expressed relative to annual mean averages[18]. Local monitoring has demonstrated that decreases in concentrations have continued post pandemic and have not returned to pre-pandemic concentrations.

The above considered, it is therefore likely that despite uncertainty in predicting such trends, the nationally projected reductions in overall NOx emissions will continue to contribute toward reducing concentrations within the AQMA, below their current level.

[18] Air Quality Expert Group (AQEG), June 2020, 'Estimation of changes in air pollution emissions, concentrations and exposure during the COVID-19 outbreak in the UK'.

Regional Influence

Local Plan

The RBC Local Plan (RBCLP)[19] sets out a vision for the communities of the RBC area up to 2031. The National Institute for Health and Care Excellence (NICE) encourages local authorities to address the issue of air pollution in their Local Plan. The RBCLP seeks to improve air quality not only in AQMAs but across the plan area and elsewhere. In particular, development proposals are expected to minimise and mitigate air pollution and to contribute towards the achievement of air quality objectives.

Strategic Policy HS5: Traffic Generation and Air Quality, Noise and Vibration, impacts on air quality by regulating developments to ensure they encourage and facilitate the use of sustainable transport options and low emission vehicles where possible and support the efficient use of existing transport networks.

This complements the Warwickshire County Council Local Transport Plan (LTP), identifying changes that will secure an improved transport network and contributing to the shared priority of improving air quality.

Local Transport Plan (LTP)

The Warwickshire County Council LTP (2023) also provides a strategy for transport management. The plan prioritises sustainable travel choices and delivering benefits for the environment, wellbeing, place and/or economy, which should all help to ensure continued compliance within the Rugby AQMA.

LTP4[20] responds to the long-term transport opportunities and challenges facing Warwickshire and the UK as a whole. Air quality is a constituent part of LTP4, as follows, further ensuring improvements to emissions to air from road traffic are part of local policy in future:

“Policy Position F1: Promote shift from road to rail and active travel modes.”

and

[19] RBC 2019, ‘Rugby Borough Council Local Plan 2011-2031.’

[20]Warwickshire County Council, Local Transport Plan 4 (2024-2030). Available at: https://www.warwickshire.gov.uk/localtransportplan

"Policy Position F2: Facilitate the transition to alternative fuels for freight vehicles"

Air Quality Action Plan

The draft 2024-2028 AQAP for the Rugby AQMA was published in September 2024 and supersedes an earlier 2006-2011 AQAP. The draft AQAP consists of sixteen core actions. The main priority for Rugby Borough Council in 2024 was to achieve continued compliance in the remaining AQMA to proceed with the revocation process in 2025.

Other measures that are ongoing include:

- Proposed Rugby Parkway station at Houlton, close to M1 J18, to ease congestion on the road network around Rugby town station;
- Homestead Link to connect the A426 with a new roundabout which will then link to Alwyn Road and Cawston Lane;
- Potsford Dam Link to reconfigure Coventry Road to join the new Potsford Dam link;
- Installation of EV Charging Points with 85 already installed by 85 and 100 EV charger planned for installation;
- Improvements to the A426 Avon Mill Roundabout and the junction of Hunters Lane with Newbold Road;
- Licensing Policy Taxi replaced to low emission vehicles; and
- Expansion of Traffic Monitoring and Survey Capabilities.

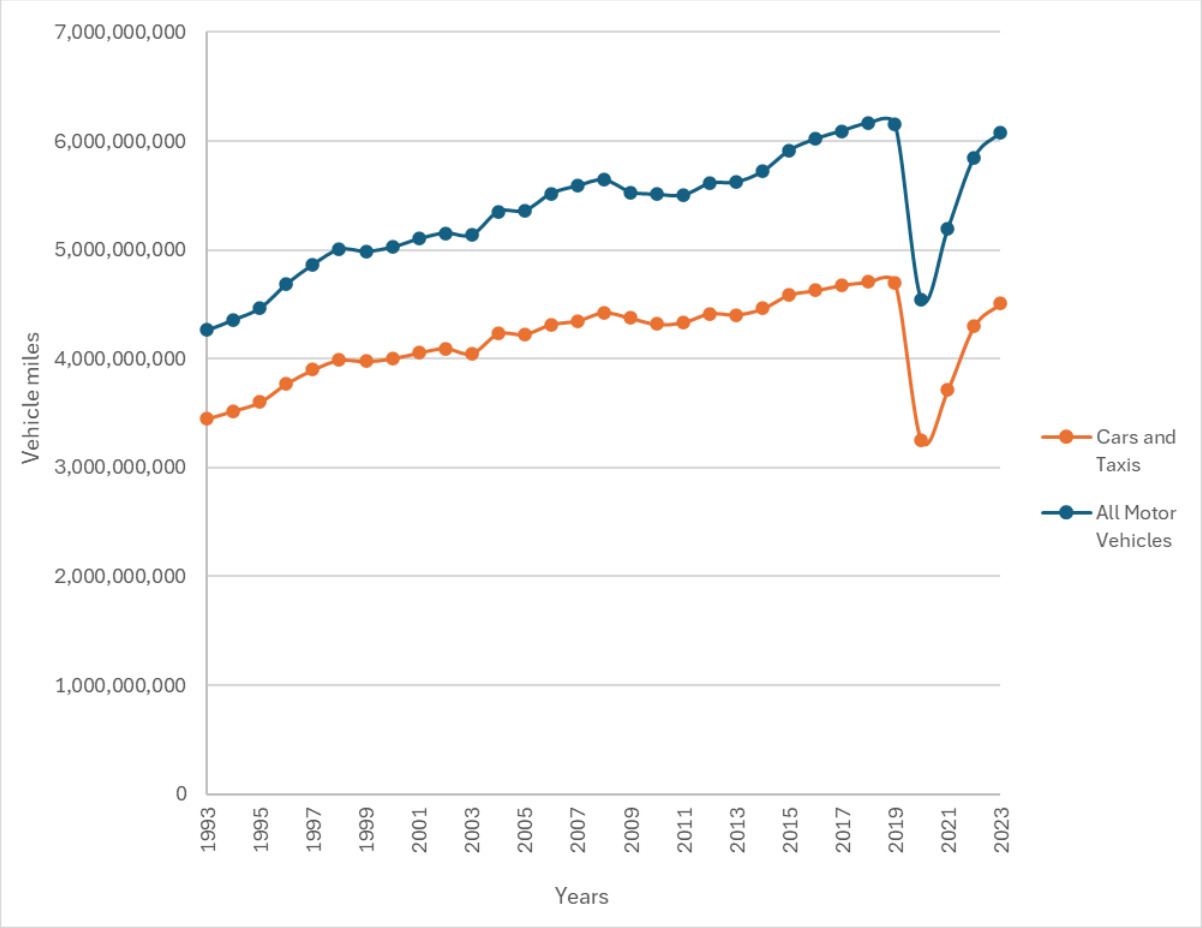
Air Quality Strategy

The development of an Air Quality Strategy following the revocation of the Rugby AQMA is a key priority for the Council. The AQS will incorporate measures from the AQAP.

Air Quality within Rugby AQMA and wider Warwickshire

As displayed in Figure H. 4[21] from Department for Transport data (DfT) vehicle miles fell in 2020 during the pandemic but increased again in 2021. They continued to increase in 2022 and 2023 but are lower than pre pandemic miles in 2019. It is likely that despite small increases in traffic flow, air quality has continued to improve due to fleet emissions reductions, as older vehicles are replaced with newer, cleaner ones.

Figure H. 4 - Annual Traffic by Vehicle Type in Warwickshire from 1993 to 2023



A comparison of the annual mean AQS objective for NO_2 against the long-term monitoring results between 2018 and 2024 from diffusion tubes located within Rugby

[21] Department for Transport (DfT), n.d. Local authority Warwickshire. Available at: https://roadtraffic.dft.gov.uk/local-authorities/72

AQMA can be seen in Figure H. 5 to Figure H. 9. A summary of these figures is shown in a radar plot in

Figure H. 11.

Figure H. 5 - Trends in annual mean NO2 concentrations at diffusion tube sites in Rugby Council (2018 to 2024) (a)

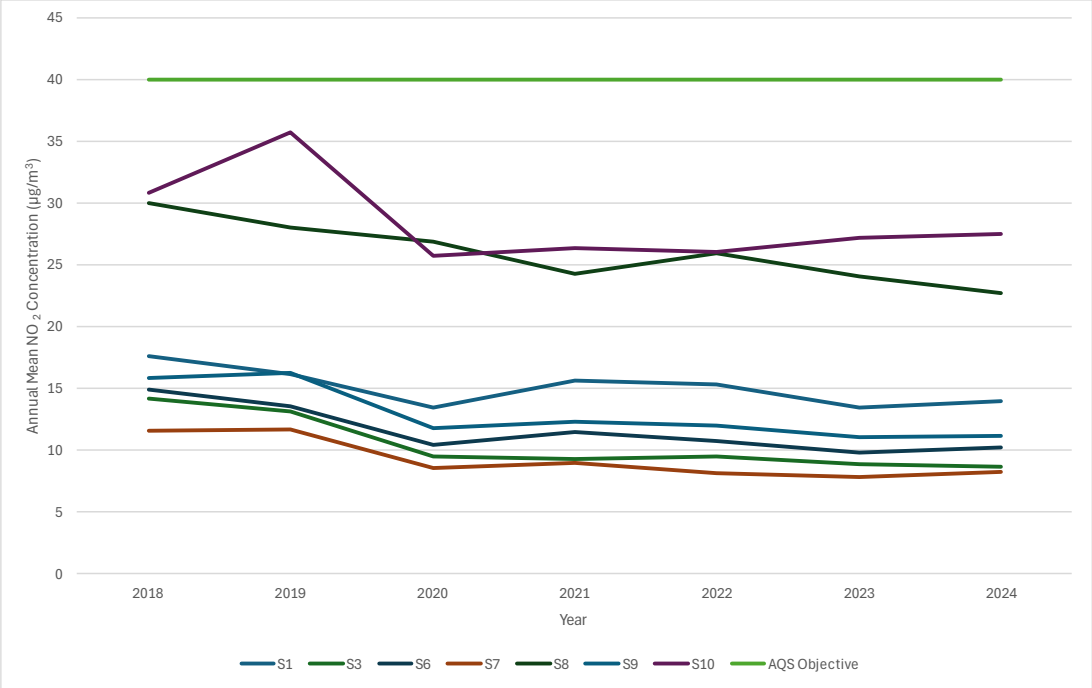


Figure H. 6 - Trends in annual mean NO2 concentrations at diffusion tube sites in Rugby Council (2018 to 2024) (b)

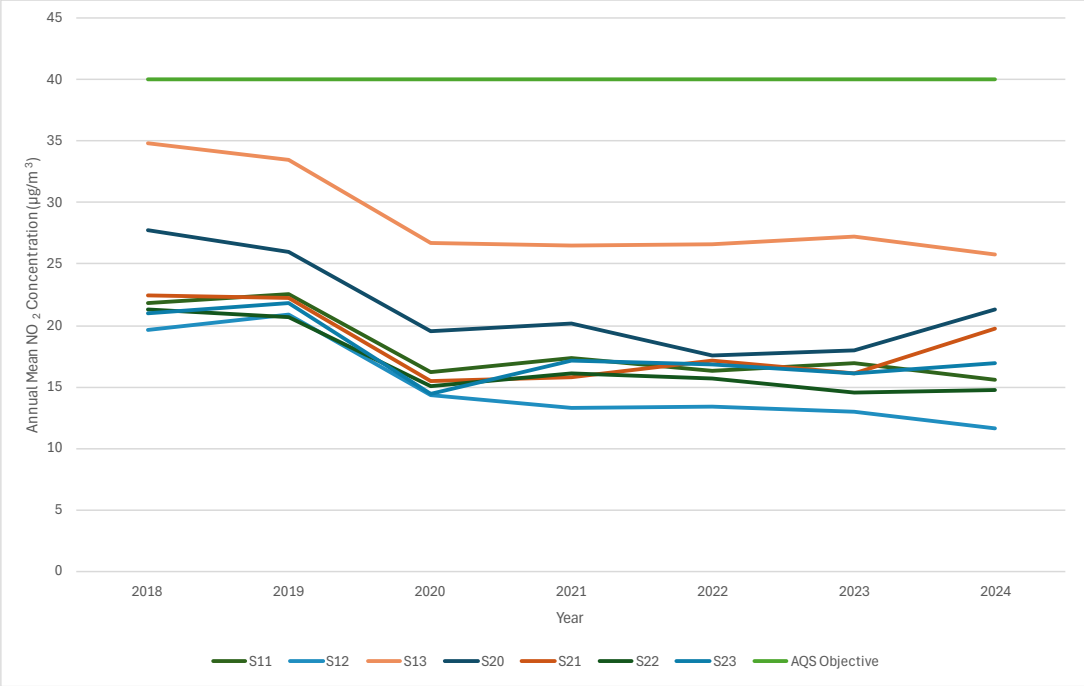


Figure H. 7 - Trends in annual mean NO2 concentrations at diffusion tube sites in Rugby Council (2018 to 2024) (c)

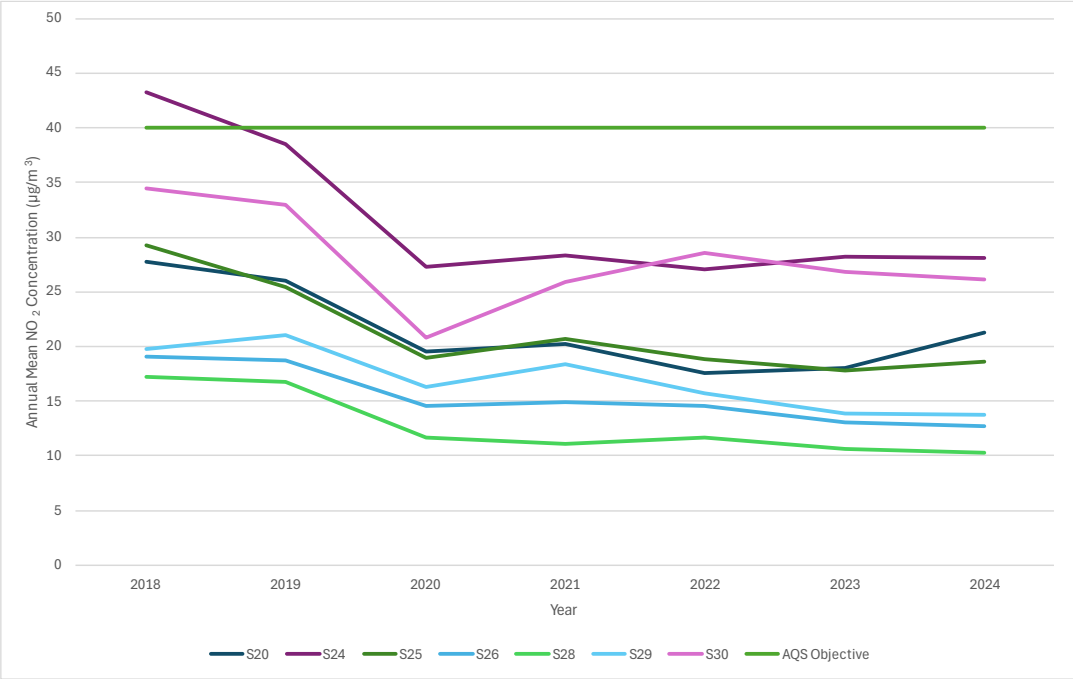


Figure H. 8 - Figure H.8 Trends in annual mean NO2 concentrations at diffusion tube sites in Rugby Council (2018 to 2024) (d)

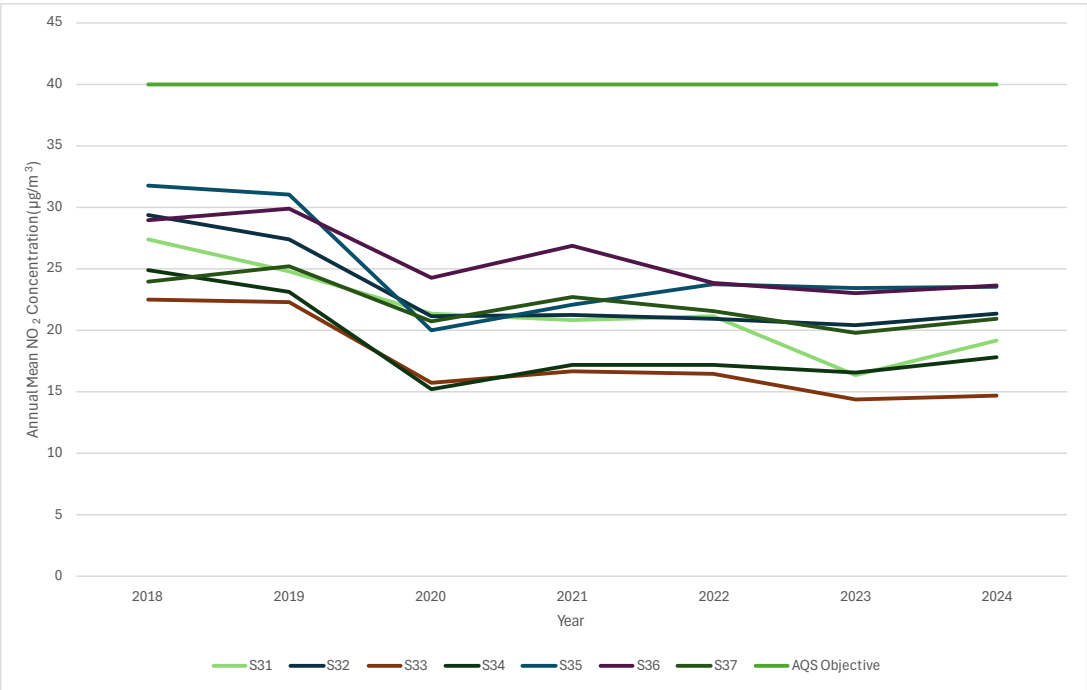


Figure H. 9 - Figure H.9 Trends in annual mean NO2 concentrations at diffusion tube sites in Rugby Council (2018 to 2024) (e)

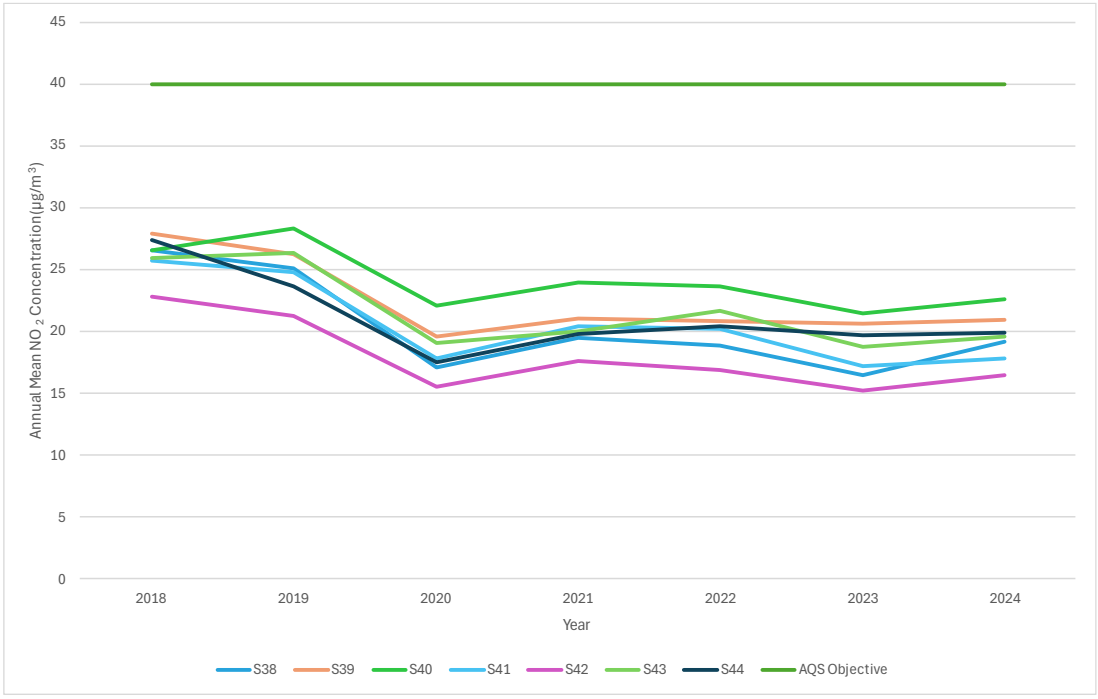


Figure H. 10 - Figure H.10 Trends in annual mean NO_2 concentrations at diffusion tube sites in Rugby Council (2018 to 2024) (f)

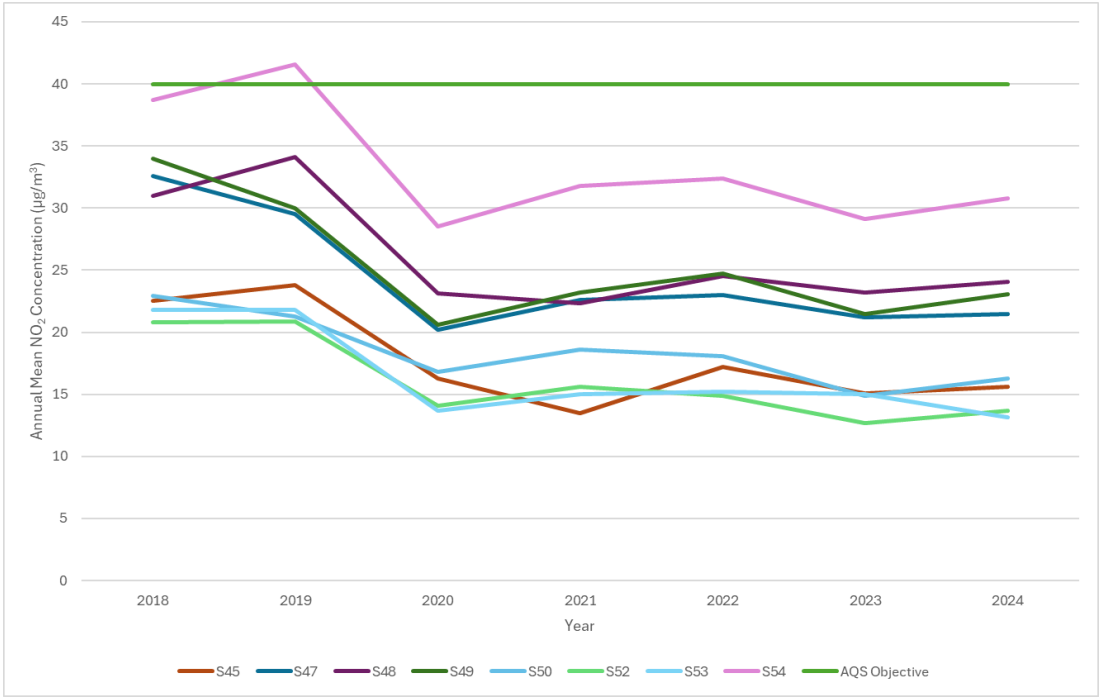


Figure H. 11 - Summary of trends in annual mean NO2 concentrations at diffusion tube sites in Rugby Council (2018 to 2024)

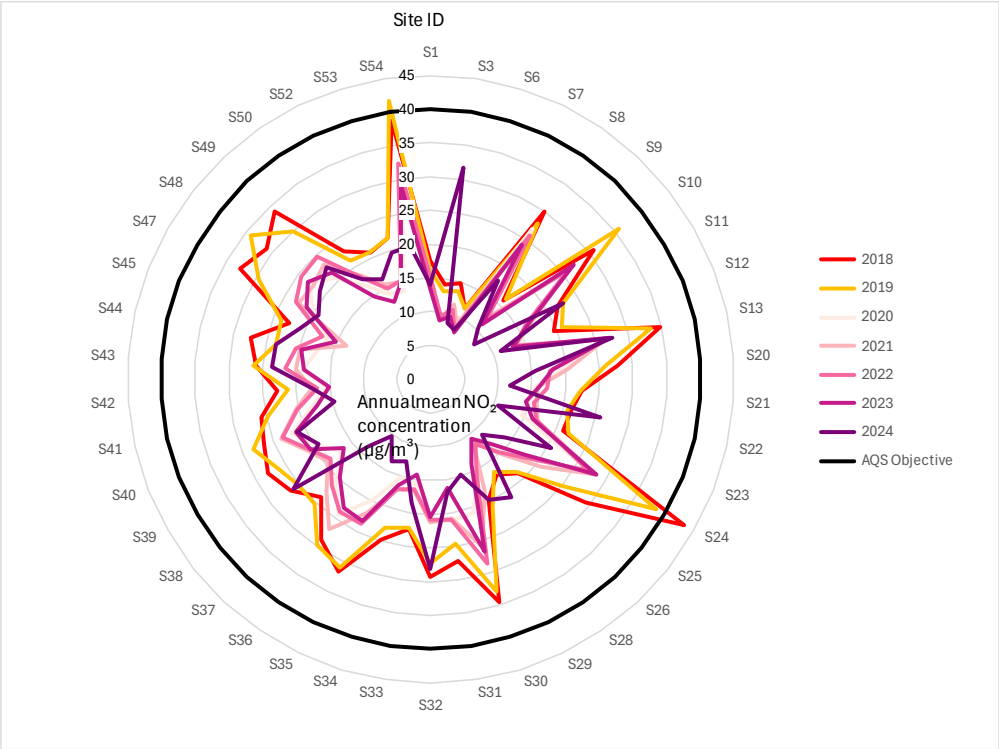


Figure H. 5 to

Figure H. **11** show that all monitoring locations within RBC, recorded NO_2 concentrations that have been consistently below the annual mean AQS objective of 40 µg/m³ for five years (since 2020).

The AQMA last saw exceedances of the annual mean NO_2 objective in 2019, at site Site S54, measuring 41.6 µg/m^3. NO_2 concentrations fell each year thereafter for 4 years until 2024. Measurements in 2020 across all monitoring sites were expected to be low due to the impacts of the Covid-19 lockdowns reducing traffic flows using this route (see Figure H. 4). The maximum annual mean NO_2 concentration recorded in 2024 was 31.8 µg/m^3 at site S2, located outside the AQMA. The maximum annual mean NO_2 concentration recorded in 2024 within the AQMA was 30.8 µg/m^3 at site S54.

Since receiving the 2024 data, the monitoring data indicate compliance has now been met for 5 consecutive years and that the revocation should be progress in line with LAQM.TG22.

Predicted Trends

To provide confidence that compliance with the objective will continue, Defra's Roadside NO_2 Projection factors[22] (Table H. 1) have been used. The 2024 monitored concentrations have been projected forward five years (2025-2029) to demonstrate concentrations are expected to remain below the AQS objective. The adjustment factors applied for Rugby were the 'Rest of UK HDV=<10%'. The projected results for the diffusion tube locations within Rugby AQMA are presented in Table H. 2.

[22] Department for Environment, Food & Rural Affairs (Defra), n.d. Roadside NO_2 Projection Factors. Available at: https://laqm.defra.gov.uk/air-quality/air-quality-assessment/roadside-no2-projection-factors/

Table H. 1 - Defra's Roadside NO_2 Projection Factors

Roadside NO_2 Projection Factors

Year	Central London	Inner London	Outer London	Rest of UK (HDV = <10%)	Rest of UK (HDV >10%)
2021	1.000	1.000	1.000	1.000	1.000
2022	0.945	0.961	0.897	0.967	0.965
2023	0.890	0.831	0.793	0.934	0.930
2024	0.851	0.779	0.735	0.880	0.874
2025	0.818	0.736	0.684	0.828	0.819
2026	0.791	0.699	0.637	0.782	0.775
2027	0.769	0.666	0.597	0.733	0.729
2028	0.752	0.641	0.570	0.682	0.684
2029	0.741	0.624	0.547	0.632	0.641
2030	0.732	0.609	0.527	0.575	0.592
2031	0.720	0.593	0.510	0.539	0.562
2032	0.709	0.579	0.494	0.506	0.534
2033	0.692	0.560	0.473	0.477	0.511
2034	0.689	0.555	0.466	0.452	0.491
2035	0.689	0.555	0.464	0.434	0.474
2036	0.689	0.553	0.461	0.426	0.468
2037	0.688	0.551	0.458	0.419	0.461
2038	0.687	0.549	0.454	0.411	0.455
2039	0.687	0.547	0.451	0.404	0.448
2040	0.686	0.545	0.448	0.396	0.442

Table H. 2 - 2024-based Projected Annual NO_2 Mean Concentrations – Sites in Rugby AQMA

Site	Monitored Annual NO_2 mean concentration ($\mu g/m^3$)	Projected Annual NO_2 mean concentration ($\mu g/m^3$)				
	2024	2025	2026	2027	2028	2029
S1	14.0	11.6	11.0	10.3	9.6	8.9
S3	8.7	7.2	6.8	6.4	5.9	5.5
S6	10.2	8.4	8.0	7.5	7.0	6.4
S7	8.3	6.9	6.5	6.1	5.7	5.2
S8	22.7	18.8	17.8	16.7	15.5	14.4
S9	11.2	9.3	8.8	8.2	7.6	7.1
S10	27.5	22.8	21.5	20.2	18.8	17.4
S11	15.6	12.9	12.2	11.4	10.6	9.8
S12	11.7	9.7	9.1	8.6	8.0	7.4
S13	25.7	21.3	20.1	18.9	17.5	16.3
S20	21.3	17.6	16.6	15.6	14.5	13.4
S21	19.7	16.3	15.4	14.5	13.5	12.5
S22	14.8	12.3	11.6	10.9	10.1	9.4
S23	16.9	14.0	13.2	12.4	11.5	10.7
S24	28.1	23.3	22.0	20.6	19.2	17.8
S25	18.6	15.4	14.5	13.6	12.7	11.7
S26	12.7	10.5	9.9	9.3	8.6	8.0
S28	10.2	8.5	8.0	7.5	7.0	6.5
S29	13.7	11.4	10.7	10.1	9.4	8.7
S30	26.1	21.6	20.4	19.1	17.8	16.5
S31	19.1	15.9	15.0	14.0	13.1	12.1
S32	21.3	17.6	16.7	15.6	14.5	13.5
S33	14.7	12.1	11.5	10.7	10.0	9.3
S34	17.7	14.7	13.9	13.0	12.1	11.2
S35	23.5	19.5	18.4	17.2	16.0	14.9
S36	23.6	19.5	18.4	17.3	16.1	14.9
S37	20.8	17.3	16.3	15.3	14.2	13.2
S38	19.1	15.8	15.0	14.0	13.0	12.1
S39	20.9	17.3	16.4	15.4	14.3	13.2
S40	22.6	18.7	17.7	16.6	15.4	14.3
S41	17.8	14.8	14.0	13.1	12.2	11.3
S42	16.5	13.7	12.9	12.1	11.2	10.4

Site	Monitored Annual NO_2 mean concentration (µg/m³)	Projected Annual NO_2 mean concentration (µg/m³)				
	2024	2025	2026	2027	2028	2029
S43	19.6	16.2	15.3	14.4	13.4	12.4
S44	19.9	16.5	15.6	14.6	13.6	12.6
S45	15.6	13.0	12.2	11.5	10.7	9.9
S47	21.5	17.8	16.8	15.7	14.6	13.6
S48	24.1	19.9	18.8	17.6	16.4	15.2
S49	23.1	19.1	18.1	16.9	15.8	14.6
S50	16.3	13.5	12.7	11.9	11.1	10.3
S52	13.7	11.3	10.7	10.0	9.3	8.6
S53	13.1	10.9	10.3	9.6	9.0	8.3
S54	30.8	25.5	24.0	22.5	21.0	19.4

Table H. 2 shows that the concentrations of NO_2 are predicted to decrease over the five-year period from 2024 to 2029 and remain well below the AQS objective. The Government's commitment to net zero[23] emissions by 2050 and the adoption of the Road to Zero[24] transport strategy are expected to deliver significant further reductions in emissions from road transport. In its publication 'National Road Traffic Projections 2022'16 the DfT has projected that NO_x emissions will decline by 64% from 2025 to 2060. In turn, this provides confidence that the AQMA can be revoked without concern that the objective will be exceeded, unless significant new sources arise, at which point the NO_2 concentrations will be assessed again. The Council intend to continue with a monitoring regime in order to observe this.

Local Development

There were no local development initiatives which have the potential to significantly impact air quality in the coming years. Any impacts from the applications listed in Appendix F: Summary of Planning Applications will be managed according to the processes outlined in the SPD[6]. All of the proposed measures, identified in Rugby's AQAP are projected to improve air quality within RBC. The proposed Rugby Parkway Station Park and ride is

[23] HM Government, October 2021, 'Net Zero Strategy: Build Back Greener'

[24] Department for Transport, July 2018, 'The Road to Zero'

projected to reduce annual mean NO_2 concentrations, with an air quality assessment demonstrating at 2 identified sensitive receptors in the vicinity of the development, a reduction of between -0.5 to 0.6 µg/m^3 in annual mean NO_2 concentrations. The Homestead Link similarly is projected to improve air quality with initial modelling demonstrating a 30-35% reduction in peak traffic with an indication that this could bring air quality benefits.

Summary, Conclusion and Recommendation

This assessment sets out the evidence relied upon by RBC in seeking to revoke the Rugby AQMA Order.

Part IV of the Environment Act 1995 (as amended 2021) requires Local Authorities to review air quality in its area and assess whether AQS objectives will be achieved. Where it has been shown that the AQS objectives will not be achieved Local Authorities must declare an AQMA and put an AQAP in place to bring air quality within acceptable levels.

Where it can be subsequently demonstrated that AQS objectives are being and will continue to be met a Local Authority can revoke an AQMA by Order under the Environment Act 1995 (as amended 2021).

The Rugby AQMA was designated in 2004 to address exceedances of traffic related NO_2 concentrations. Since 2004, monitoring has shown a continued reduction in pollutant concentrations, with recorded values having fallen below the AQS consistently for several years, since 2020.

National, regional and local policies have influenced the reduction in polluting emissions within the AQMA alongside RBC's draft AQAP, and it is reasonable to expect that further reductions will be achieved through the increasing use of ultra-low and zero emission vehicles in the coming years.

Having considered the historical monitoring data associated with Rugby AQMA, national trends in emissions and any likely local impacts on the air quality within the AQMA, the Council is satisfied that the AQMA can be revoked. Whilst NO_2 concentrations within the AQMA have been consistently below the AQS objective for five years, it has also been demonstrated that this is likely to continue.

It is therefore recommended that the Rugby AQMA be revoked at the earliest opportunity, subject to Defra approval. As per paragraph 4.12 of LAQM.PG(22), the Council will produce an Air Quality Strategy, which will effectively supersede local action planning work in the

event of revocation, ensuring continued air quality improvements beyond statutory designations.

Draft AQMA Revocation Order

Rugby Borough Council Order 2025

Environment Act 1995 Part IV Section 83(2)(b)

Order Revoking an Air Quality Management Area

Rugby Borough Council, in exercise of the powers conferred on it by Section 83(2)(b) of the Environment Act 1995 hereby makes the following order:

1. This Order shall revoke the area known as Rugby AQMA (as shown in the attached map) declared for the Nitrogen dioxide (NO_2) - Annual Mean on 16/12/2004.
2. This Order shall come into force on 1st January 2026.

The Common Seal of Rugby Borough Council

Was hereunto affixed

In the presence of:

……..

Dated:

……..

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
ANPR	Automatic Number Plate Recognition (cameras)
AQS	Air Quality Standard
ASR	Annual Status Report
AURN	Automatic Urban and Rural Network
CBA	Cost Benefit Analysis
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
EPA	Environmental Protection Act
EV	Electric Vehicle
LAQM	Local Air Quality Management
LCWIP	Local Cycling and Walking Infrastructure Plan
LEVI	Local EV Infrastructure
LGV	Light Goods Vehicles
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PHOF	Public Health Outcomes Framework
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
RBC	Rugby Borough Council
SO_2	Sulphur Dioxide
SPD	Supplementary Planning Document
TEA	Triethanolamine

Abbreviation	Description
UKHSA	UK Health Security Agency
UKSPF	UK Shared Prosperity Fund
WCC	Warwickshire County Council

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.