Derby City 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: June, 2025

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Local Responsibilities and Commitment

This ASR was prepared by the Environmental Protection Team of Derby City Council with the support and agreement of the following officers and departments:

- Traffic and Transport
- Public Health
- Climate Change Team

This ASR has been approved by:

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Executive Summary: Air Quality in Our Area

Air Quality in Derby

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 still needed to protect people and the environment from the effects of air pollution.

Derby City Council is taking a range of actions to improve air quality across the city. We are committed to reducing pollution levels and making sure that future developments take air quality into account. The goal is to continue this progress so that, in time, all Air Quality Management Areas (AQMAs) in Derby can be revoked.

Conclusions and Priorities

This is the second year in a row that all pollutant concentrations, including nitrogen dioxide (NO_2), have complied with the National Objectives at all monitoring locations in Derby.

Concurrently, the AQMA in Spondon/A52 has now been officially revoked, with a revocation order issued in November 2024.

As stated in previous reports, the boundary of the inner/outer ring road AQMA is out of date and work is being undertaken to re-design the boundaries of this AQMA. The new boundaries are due to be formally amended, subject to local consultation and approval.

There are several major upcoming developments that may influence local air quality including:

- Work is continuing on the former Celanese SmartParc development site. Over the coming years, this will create a large-scale food manufacturing and R&D hub which could generate a number of new vehicle trips.
- The Derby Triangle commercial site (now called St Modwen Park) within the Wyvern area of the city is now reaching an advanced stage of development. This site has potential to create new HGV trips, primarily impacting the A52, Nottingham Road and the Wyvern area.
- There continues to be significant development within Infinity Park Derby and the surrounding Infinity Garden Village growth zone in the south of the city. This is being serviced by a new junction off the A50 and could therefore impact traffic flows into and out of the south of the city.
- Rolls Royce Submarines Limited (RRSL) are now underway with a significant expansion programme at their Raynesway facility. This project will involve almost doubling the size of the site, creating new manufacturing and office facilities, and

adding 1,170 jobs. A new Multi-Storey Car Park is proposed within the St Modwen Park site to support this development.

How to get Involved

The Council remain actively involved in the Derby and Derbyshire Air Quality Working Group and local Active Travel and Climate Forums.

The Derby City Council website includes further details of how to get involved in Air Quality here: https://www.derby.gov.uk/transport-and-streets/air-quality-in-derby/

Active public consultations can be found here: https://www.derby.gov.uk/council-and-democracy/consultations/your-city-your-say-latest-consultations/.

Derby City Council again promoted awareness of air quality issues on National Clean Air Day on 19th June 2025. We encourage people to visit https://www.cleanairday.org.uk/ for useful resources and information on how to get involved.

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1 Local Air Quality Management

This report provides an overview of air quality in Derby 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 Derby City 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 Derby City Council can be found in Table 2.1. The table presents a description of the one remaining AQMA that is currently designated within Derby. Appendix D: Map(s) of Monitoring Locations and AQMAs provides maps of the AQMA and also the air quality monitoring locations in relation to the AQMA. The air quality objectives pertinent to the current AQMA designation are as follows:

- NO_2 annual mean

Derby City Council are in the process of developing new boundaries for our only designated AQMA (*Derby NO2 AQMA No.1 Ring Roads*).

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
No.1 Ring Roads	Declared 01/08/2001, Amended 01/09/2002 and 23/10/2006	NO2 Annual Mean	An AQMA encompassing the Inner and Outer Ring-Roads in the city, as well as some sections radial roads and the entire length of Osmaston Road.	NO	63.6µg/m3	None (Maximum Concentration 38.2µg/m^3 - London Road)	2	Derby City Council Air Quality Action Plan 2020	The AQAP is available here.

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

☒ **Derby City Council confirm that all current AQAPs have been submitted to Defra.**

2.2 Progress and Impact of Measures to address Air Quality in Derby City Council

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

- "*DCC undertook passive diffusion tube monitoring of NO_2 at 65 monitoring locations during 2023. During 2023, there were no exceedances at any of the passive monitoring sites. Diffusion Tube Site LR1 (London Road) recorded the highest annual mean NO_2 concentration in 2023 (38.2 µg/m^3 at relevant exposure). As no diffusion tube sites recorded an NO_2 concentration >60µg/m^3 it is considered unlikely that there were any exceedances of the AQO for 1-hour mean NO_2.*"

- "*QA/QC of monitoring data has been discussed, and the national bias adjustment factor was selected for 2023 with details of the methodology (i.e. bias adjustment spreadsheet) provided. The justification for the selection of the adjustment factor in 2023 is well supported. Annualisation was required at 14 locations (13 diffusion tubes and 1 automatic monitor for NO_2) during 2023. However, no locations required distance correction in 2023. The Council have provided good mapping of all monitoring locations within the district on their website*."

- "*On the basis of the evidence provided by the local authority the conclusions reached in the report are **accepted** for all sources and pollutants. Following the completion of this report, DCC should submit an Annual Status Report in 2025*."

Derby City Council 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. 28 measures are included within Table 2.2, with the type of measure and the progress Derby City Council have made during the reporting year of 2024 presented. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2.

More detail on these measures can be found in Derby City Council's latest Air Quality Action Plan (2020). Key completed measures are:

- Capability Programme
- Updated Air Quality Action Plan (AQAP)

- Local Cycling and Walking Infrastructure Plan (LCWIP)
- Derby Roadside NO2 Local Air Quality Plan - Traffic Management Scheme
- Air Quality Awareness Raising
- Local Growth Fund (LGF)
- Derby bus station vehicular entrance/exit upgrades
- City Centre to Derby Rail Station Access Improvement Scheme
- Pentagon Island - Spondon (Nottingham Rd) cycleway
- Traffic light priority at Key Junctions

Derby City Council expects the following measures to be completed over the course of the next reporting year:

- Transforming Cities Fund (TCF) implementation
- Future Transport Zones (FTZ) Programme
- Active Travel Fund
- Derby Strategic Corridors
- Public Realm work within the key areas of the city centre
- Pentagon Island Cycleway
- Active Travel Strategy

Derby City Council worked to implement these measures in partnership with the following stakeholders during 2024/25:

- Nottingham City Council;
- South Derbyshire District Council;
- Amber Valley Council;
- Erewash Borough Council;
- National Highways;
- Derbyshire County Council.

The principal challenges and barriers to implementation that Derby City Council anticipates facing are trying to balance the delivery of the various programmes in Table 2.2 with other priorities.

Whilst the measures stated above and in Table 2.2 will help to contribute towards compliance, Derby City Council anticipates that further additional measures not yet prescribed will be required in subsequent years to maintain compliance and enable the revocation of AQMA No.1 Ring Roads.

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	EV Charging Infrastructure	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2019	2030	DCiC, NCC, OZEV, EV Charging Providers	Various schemes under TCF, FTZ and LEVI	Funded	>5 million	Planning	Reduced vehicle emissions from switch to EVs	100 New EV Charge Points	TCF now delivered around 100 EV Points. LEVI main funding source. Up to 800 new EV Points in Derby up to 2030, primarily aimed at on-street parking, but with some destination charging.	
2	Area and Regional Coordination of AQ Measures through AQWG	Other	Other	2016	ongoing	Derbyshire and Derby City Authorities	Using existing DCC funding to work with Derbyshire County Council	Funded		Ongoing	Wide range of measures proposed under Work Plan, AQ Action Plan and AQ Strategy	AQWG Work Plan Implementation and annual reporting to Health Protection Board and Health and Well-being Boards	Operational since 2016	Meets quarterly. Derby/Derbyshire Air Quality Strategy published in 2024.
3	AQ and Planning	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance		2026	DCiC, EMAQN	LA resourced	Funded		Planning	Ensuring AQ is at the heart of planning decisions. To assist EV charging implementatio n under EV schemes being taken forward under TCF/FTZ.	Completion of Local Plan AQ Policy and subsequently, completion of Supplementar y Planning Guidance (or Developer's Guide) on AQ and EV Charging Policy. Also developing specific Planning Guidance on Derby Local Roadside NO2 Plan TMS.	EMAQN template produced for use in DCC Policy. Work started on new Local Plan policies.	New policy being written as part of Local Plan review. SPD currently resource-constrained.
4	Derby Roadside NO2 Local Air Quality Plan - Traffic Managemen t Scheme	Traffic Management	UTC, Congestion management, traffic reduction	2020	2025	DCiC and JAQU	Subject to DEFRA Funding	Funded	> £10 million	Implementation	Reduction in annual average NO2 along Stafford Street to below 40µgm3 by 2020 (reduction of 9.4µgm-3	Compliance with EU Limit Values	Scheme complete. Exit process has begun.	

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
											NO2 based on 2020 baseline)			
5	National Bus Strategy	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	2021	2022	DCiC and Local Bus Service Providers	Requirement on all LAs	Funded	£1 million - £10 million	Planning	To be determined.	Completion of Bus Partnership Scheme	BSIP and Enhanced Partnership approved by cabinet 16 November 2022.	
6	Review Derby Burning of Waste Enforcement Policy	Other	Other		2025	DCiC	Derby City Council	Partially Funded	£10k - 50k	Planning	NO2 and PM2.5 emissions reduction. Hard to quantify due to lack of data on amount of burning.	Completion of Policy.	Draft Policy nearly complete.	Main focus will be on commercial waste burning.
7	Transforming Cities Fund (TCF) implementation	Alternatives to private vehicle use	Other	2020	2025	DCiC jointly with NCiC and private partners	Derby CC delivery jointly with Nottingham CC - £161m awarded under TCF (Derby awarded £61.4m)	Funded	> £10 million	Completed	Emission reductions to be modelled for certain projects. Hard to quantify in some cases.	Large variety of measures being delivered under TCF. See further items for individual scheme details.	See extensive sustainable active travel choices work programme	Completed
8	Future Transport Zones (FTZ) Programme	Transport Planning and Infrastructure	Other	2020	2025	DCiC jointly with NCiC	Derby CC delivery jointly with Nottingham CC - £16.7m awarded under FTZ Fund (Derby allocated £4.3million.	Funded	<£5 million	Implementation	Emission reductions to be modelled for certain projects. Hard to quantify in some cases.	E.g. No. of people using data platform, MaaS app and mobility hubs.	6 Streets Mobility Hub now delivered. Campus Hub at Derby University now delivered. Four District Centre hubs now being delivered. Car Club also now delivered.	
9	Active Travel	Traffic Management	Other	2020	Ongoing	DCiC, DfT	Active Travel Fund/Capability Funding	Funded	£500k - £1 million	Implementation	Range of Active Travel measures, so emission reduction from reduction in use of cars	No. of people using new cycle lanes and No. of converted trips to cycling/walking from car. Amount of reallocated road space	Range of measures including active travel, cycle lanes, Active Travel Strategy	
10	e-Scooter Hire Trial	Promoting Low Emission Transport	Other	2021	2024	DCC, Wind Mobility	TCF	Funded		Aborted	Reduced vehicle emissions	No. of users and scooter miles covered.	Scheme aborted due to scooter provider pulling out.	

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
11	Derby Strategic corridors	Transport Planning and Infrastructure	Bus route improvements	2020	2025	DCC, Bus Providers and Private Partners	TCF	Funded	£6 million	Completed	Reduced vehicle emissions	Benefits and Outcomes Measures Report	Complete	
12	Public Realm work within the key areas of the city centre (The Spot and Victoria and Albert Street)	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	2020	2025	DCC and Private Partners	TCF	Funded	>£10 million	Completed	Reduced vehicle emissions	Benefits and Outcomes Measures Report	Complete	
13	Derby bus station vehicular entrance/exit upgrades	Transport Planning and Infrastructure	Bus route improvements	2020	Complete	DCC	TCF	Funded	£1 million - £10 million	Completed	Reduced bus emissions	Benefits and Outcomes Measures Report	Complete	
14	City Centre to Derby Rail Station Access Improvement Scheme	Transport Planning and Infrastructure	Cycle network	2020	Complete	DCC	TCF	Funded	£1 million - £10 million	Completed	Reduced vehicle emissions by encouraging walking and cycling	Benefits and Outcomes Measures Report	Complete	
15	Strategic cycle link (Derby)	Transport Planning and Infrastructure	Cycle network	2020	Complete	DCC	TCF	Funded	£500k - £1 million	Completed	Reduced vehicle emissions by encouraging cycling	Benefits and Outcomes Measures Report	Complete	
16	City centre - Mickleover cycle route	Transport Planning and Infrastructure	Cycle network	2020	Complete	DCC with private partners	TCF	Funded	£500k - £1 million	Completed	Reduced vehicle emissions by encouraging cycling	Benefits and Outcomes Measures Report	Complete	
17	Pentagon Island - Spondon (Nottm Rd) cycleway	Transport Planning and Infrastructure	Cycle network	2020	Complete	DCC	TCF	Funded	£1 million - £10 million	Completed	Reduced vehicle emissions by encouraging cycling	Benefits and Outcomes Measures Report	Complete	
18	City Centre - Raynesway (A52) cycleway	Transport Planning and Infrastructure	Cycle network	2020	Complete	DCC	TCF	Funded	£1 million - £10 million	Completed	Reduced vehicle emissions by encouraging cycling	Benefits and Outcomes Measures Report	Complete	
19	Traffic light priority at Key Junctions	Transport Planning and Infrastructure	Bus route improvements	2020	Complete	DCC/Bus Partners	TCF	Funded	£1 million - £10 million	Completed	Reduced bus emissions	Benefits and Outcomes Measures Report	Complete	
20	Smart Ticketing	Transport Planning and Infrastructure	Bus route improvements	2020	2025	DCC with public transport partners	TCF/FTZ	Funded	£100k - £500k	Implementation	Improved journey planning and	Benefits and Outcomes	Ride Travel App out for trial.	

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
											increase in use of sustainable transport modes	Measures Report		
21	School Safe Havens	Promoting Low Emission Transport	UTC, Congestion management, traffic reduction	2023	Ongoing	DCC/Schools	DfT	Funded	£500k - £1 million	Implementation	No. mode shifts - Reduction in NO2 through monitoring before/after	No. of school safe haven TROs	14 School Safe Havens now confirmed with TRO in place and camera enforcement. Additional school due for public consultation in summer 2025. AQ monitoring taking place outside 13 schools.	Local opposition and creating parking issues on nearby roads are main barriers to implementation on further school sites.
22	Duffield Road Bus Priority	Transport Planning and Infrastructure	Bus route improvements	2022	2026	DCC	EMCCA	Funded	£3 million	Implementation	Reduced vehicle emissions	Bus journey times	Public consultation completed	BSIP Scheme
23	Osmaston Road Bus Priority	Transport Planning and Infrastructure	Bus route improvements	2022	2026	DCC	EMCCA	Funded	£1.8 million	Implementation	Reduced vehicle emissions	Bus journey times	Public consultation completed	BSIP Scheme
24	Derby Strategic corridors	Transport Planning and Infrastructure	Bus route improvements	2025	2026	DCC, Bus Providers and Private Partners	EMCCA	Funded	£1 million	In progress	Reduced vehicle emissions	Benefits and Outcomes Measures Report	Planning	BSIP Scheme
25	Bus Fleet Electrification	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	2025	2026	DCC, Bus Providers	EMCCA	Funded	£1 million	Planning	Reduced vehicle emissions	Number of BEV buses	Planning	BSIP Scheme
26	Bus Service Enhancements	Alternatives to private vehicle use	Bus route improvements	2024	2026	DCC, Bus Providers	EMCCA	Funded	£2.8 million	In progress	Improved journey planning and increase in use of sustainable transport modes	Number of enhanced routes	In progress	BSIP Scheme
27	Derby Heat Network	Alternatives to fossil fuel heating	Green heating	2025	2029 (initial phase)	DCiC, 1Energy and Local Businesses	Green Heat Network Fund and Private Funding Sources	Funded	£0	Planning	Reduction in NO2 and PM2.5 emissions from conversion of gas boilers or other fossil fuel heating to Heat Network powered by Heat Pumps	Number of converted boilers	Delivery company confirmed and planning initiated	Privately managed project, however Council will support through Planning system, infrastructure regulation and as a potential future customer. Initial Phase is a 4 year programme to

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
														2029, with intention for significant future expansion.
28	Active Travel Strategy	Promoting Travel Alternatives	Walking/Wheeling	2024	2025	DCiC	DCiC	Funded	<£10k	Implementation	Indirect benefits for vehicle emission reductions from mode shift	Completion of Strategy	Draft Complete	

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

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy[1], local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter ($PM_{2.5}$)). There is clear evidence that $PM_{2.5}$ (particulate matter smaller 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Derby City Council are taking the following measures to address $PM_{2.5}$:

1. A review of bonfire complaint investigation and enforcement procedures has been undertaken and is currently being formalised. A wider 'burning of waste' policy is due to go out for public consultation during 2025/26.
2. Smoke from chimney enforcement continues, with additional information and campaigns on the effects of smoke from chimneys taking place throughout the year. A new city-wide Smoke Control Order is planned.
3. A survey will be taking place during 2025/26 to better understand the number of residents using wood burning stoves.
4. Continued focus on securing planning conditions to require construction dust management plans for the majority of new development and all demolition consents in the City.

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

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

This section sets out the monitoring undertaken within 2024 by Derby City Council 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

Derby City Council undertook automatic (continuous) monitoring at 2 sites during 2024. Table A.1 in Appendix A shows the details of the automatic monitoring sites. The page presents automatic monitoring results for Derby, with automatic monitoring results also available through the UK-Air website. This ASR presents the first full year of data from the PM_{10} AURN monitor installed at Stockbrook Park in November 2023.

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

3.1.2 Non-Automatic Monitoring Sites

Derby City Council undertook non- automatic (i.e. passive) monitoring of NO_2 at 74 sites during 2024.

Table A.2 in Appendix A presents the details of the non-automatic sites.

Although attempts were made during 2023/24 to minimise the risk of tampering at our sites, including moving tubes up higher and attaching ‘do not tamper’ notices next to them, a number of tubes had been removed.

Results for 4 of these sites (BUR1, ML1, MR1 and UNR2) have been annualised and included for completeness. No data is available for site NR4 and has been excluded.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments and any other adjustments applied (e.g. annualisation and/or distance correction), are included in Appendix C.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, annualisation (where the annual mean data capture is below 75% and greater than 25%), and distance correction. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO_2)

Table A.3 and Table A.4 in Appendix A compare the ratified and adjusted monitored NO_2 annual mean concentrations for the past five years with the air quality objective of 40µg/m^3. Note that the concentration data presented represents the concentration at the location of the monitoring site, following the application of bias adjustment and annualisation, as required (i.e. the values are exclusive of any consideration to fall-off with distance adjustment). This information is shown graphically on Figures A.1 to A8.

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.

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

There were no exceedances during 2024, with an annual mean NO_2 concentration of 25.0µg/m^3.

3.2.2 Particulate Matter (PM_{10})

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

Table A.7 in Appendix A compares the ratified continuous monitored PM_{10} daily mean concentrations for the past five years with the air quality objective of 50µg/m^3, not to be exceeded more than 35 times per year.

There were no exceedances during 2024, with an annual mean PM_{10} concentration of 11.0µg/m^3.

3.2.3 Particulate Matter ($PM_{2.5}$)

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

There were no exceedances during 2024, with an annual mean $PM_{2.5}$ concentration of 7.0µg/m^3.

3.2.4 Sulphur Dioxide (SO_2)

Derby City Council does not currently monitor SO_2 concentrations and currently has no plans to do so in the future.

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Which AQMA? (1)	Monitoring Technique	Distance to Relevant Exposure (m) (2)	Distance to kerb of nearest road (m) (1)	Inlet Height (m)
UKA00630	St Alkmund's Way AURN	Roadside	435763	336306	NO2	Yes	Derby NO2 AQMA No.1 Rings Roads	Chemiluminescent	N/A	3.7	1.2
UKA01027	Derby Stockbrook Park	Urban Background	434245	335525	PM10, PM2.5	No	-	FIDAS	N/A	0.3	2.0

Notes:

(1) N/A if not applicable

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

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

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
AB1	201 Abbey Street	Roadside	434846	335657	NO2	Y - No.1 Ring Roads	0.0	2.0	No	1.8
AR1	189/191 Ashbourne Road	Roadside	433633	336850	NO2	N	0.0	4.0	No	1.8
AR2	259 Ashbourne Road	Roadside	433459	336918	NO2	N	N/A	14.5	No	1.8
AR3	148 Ashbourne Road	Roadside	433796	336786	NO2	N	0.0	3.0	No	1.8
AR4	Millgate, Ashbourne Road	Roadside	434307	336565	NO2	Y - No.1 Ring Roads	0.0	4.0	No	1.8
AS1	Kenneth House, Agard Street	Roadside	434545	336570	NO2	Y - No.1 Ring Roads	0.0	2.5	No	1.8
AS2	Centro West, Agard Street	Roadside	434579	336571	NO2	N	0.0	4.2	No	1.8
BR1	Bass Recreation Ground/The Holmes	Urban Background	435764	336306	NO2	N	N/A	4.0	No	1.8
BUR1	220 Burton Road	Roadside	434785	335241	NO2	Y - No.1 Ring Roads	0.0	3.0	No	1.8
BUR2	114a Burton Road	Roadside	435025	335508	NO2	Y - No.1 Ring Roads	0.0	2.0	No	1.8
CAV1	171/182 Cavendish Court	Roadside	434820	336505	NO2	N	0.0	15.0	No	1.8
CC1	Casteward Court, Traffic Street	Kerbside	435725	335802	NO2	Y - No.1 Ring Roads	0.0	35.0	No	1.8

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)
CH1	Council House	Urban Centre	435496	336294	NO2	N	N/A	>50	No	1.8
CM1	Victoria Street/Corn Market	Roadside	435262	336157	NO2	N	N/A	5.0	No	1.8
DER1	198 Derby Road	Roadside	438942	335864	NO2	N	0.0	2.0	No	1.8
DR1	Duffield Road/North Street	Roadside	434814	337041	NO2	Y - No.1 Ring Roads	2.0	4.0	No	1.8
DR2	5 Duffield Road	Roadside	434937	336916	NO2	Y - No.1 Ring Roads	0.0	4.0	No	1.8
EG1	Eastgate (Pentagon)	Roadside	436064	336487	NO2	N	N/A	3.0	No	1.8
FG1	100A Friar Gate	Roadside	434718	336375	NO2	Y - No.1 Ring Roads	0.0	11.5	No	1.8
FG2	63 Friar Gate	Roadside	434450	336523	NO2	Y - No.1 Ring Roads	0.0	4.9	No	1.8
GC1	23 Gilbert Close	Roadside	439776	335696	NO2	Y - No.2 A52	0.0	10.0	No	1.8
HL1	109 Highfield Lane	Roadside	437382	336044	NO2	N	2.0	19.0	No	1.8
HS1	16/18 Harrow Street	Roadside	437196	334410	NO2	Y - No.1 Ring Roads	0.0	8.0	No	1.8
KL1	10 Kirkleys Ave North	Roadside	440206	335650	NO2	Y - No.2 A52	0.0	10.0	No	1.8
KL2	27 Kirkleys Ave South	Roadside	440198	335611	NO2	Y - No.2 A52	0.0	12.0	No	1.8

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)
KR1	8 Kedleston Road (Chiropodist)	Roadside	434775	337086	NO2	N	0.0	8.0	No	1.8
LR1	938 London Road	Roadside	437676	334090	NO2	Y - No.1 Ring Roads	0.0	3.0	No	1.8
LR2	1178 (1170) London Road	Roadside	438162	333654	NO2	Y - No.1 Ring Roads	0.0	5.0	No	1.8
LW1	18 Leeway	Roadside	439647	335575	NO2	Y - No.1 Ring Roads	0.0	9.8	No	1.8
ML1	25 Morledge	Roadside	435477	336176	NO2	Y - No.2 A52	N/A	11.0	No	1.8
MR1	14 Mansfield Road	Roadside	435439	336817	NO2	N	0.0	3.0	No	1.8
NR1	24 Nottingham Road	Roadside	439899	335348	NO2	Y - No.1 Ring Roads	0.0	5.7	No	1.8
NR2	203/201 Nottingham Road	Roadside	436700	336637	NO2	Y - No.1 Ring Roads	0.0	2.0	No	1.8
NR3	123 Nottingham Road	Roadside	435795	336625	NO2	Y - No.1 Ring Roads	0.0	3.0	No	1.8
NR4	63 Nottingham Road	Roadside	435586	336642	NO2	Y - No.1 Ring Roads	0.0	3.0	No	1.8
NS1	32 Newdigate Street	Roadside	435091	333526	NO2	Y - No.1 Ring Roads	0.0	2.0	No	1.8
NS2	80 Newdigate Street	Roadside	435022	333581	NO2	Y - No.1 Ring Roads	0.0	2.0	No	1.8
OPR1	523 Osmaston park Road	Roadside	436809	332826	NO2	Y - No.1 Ring Roads	0.0	3.0	No	1.8

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)
OPR2	104 Osmaston Park Road	Roadside	435716	333327	NO2	Y - No.1 Ring Roads	0.0	4.5	No	1.8
OR1	831 Osmaston Road	Roadside	436992	332713	NO2	Y - No.1 Ring Roads	0.0	10.0	No	1.8
OR2	29 Ivy Square off Osmaston Road	Roadside	436046	334857	NO2	Y - No.1 Ring Roads	0.0	6.0	No	1.8
OR3	114 Osmaston road	Roadside	435534	335467	NO2	Y - No.1 Ring Roads	0.0	2.0	No	1.8
OR4	59 Osmaston Road	Roadside	435440	335717	NO2	Y - No.1 Ring Roads	0.1	2.0	No	1.8
PL1	26 / 24a Penny Long Lane	Urban Background	434364	337881	NO2	Y - No.1 Ring Roads	10.0	N/A	No	1.8
RS1	150 Radbourne Street	Roadside	433118	336650	NO2	N	0.0	5.0	No	1.8
RT1	Royal Telegraph Pub	Roadside	435653	335706	NO2	N	0.0	2.0	No	1.8
RW1	7 Raynesway	Roadside	438535	333508	NO2	Y - No.1 Ring Roads	0.0	8.0	No	1.8
SMC1	St Marys Court 1	Roadside	435203	336779	NO2	Y - No.1 Ring Roads	0.0	3.0	No	1.8
SMC2	St Marys Court 2	Roadside	435249	336785	NO2	Y - No.1 Ring Roads	0.0	12.8	No	1.8
SR1	1 Station Road	Roadside	439789	335412	NO2	N	0.0	8.0	No	1.8
SS1	Stafford Street Burleigh Mews Flats	Roadside	434748	336352	NO2	Y - No.2 A52	0.0	4.0	No	1.8

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)
SS2	Roman House, Stafford Street	Roadside	434766	336329	NO2	Y - No.1 Ring Roads	0.0	7.1	No	1.8
SS3	46 Stafford Street	Roadside	434703	336213	NO2	N	0.0	5.2	No	1.8
SS4	59a Stafford Street	Roadside	434688	336155	NO2	N	0.0	2.0	No	1.8
UNR2	414 Uttoxeter New Road	Roadside	433190	335380	NO2	N	0.0	7.7	No	1.8
UNR3	431 Uttoxeter New Road	Roadside	433186	335327	NO2	Y - No.1 Ring Roads	0.0	9.0	No	1.8
UNR4	266 Uttoxeter New Road	Roadside	433786	335778	NO2	Y - No.1 Ring Roads	0.0	2.0	No	1.8
UNR5	199 Uttoxeter New road	Roadside	433887	335804	NO2	Y - No.1 Ring Roads	0.0	2.0	No	1.8
UNR6	126 Uttoxeter New Road	Roadside	434227	335958	NO2	N	0.0	10.0	No	1.8
UNR7	Rowleys Mill Flats, Uttoxeter New Road	Roadside	434461	336041	NO2	N	0.0	4.9	No	1.8
UOR1	208 Uttoxeter Old Road	Roadside	433877	335850	NO2	N	0.0	4.0	No	1.8
UOR3	122/124 Uttoxeter Old Road	Roadside	434109	336255	NO2	N	0.0	1.8	No	1.8
WH1	115 Windmill Hill Lane	Roadside	433161	336692	NO2	N	0.0	8.2	No	1.8
AKPS1	Akaal Primary School, Grange	Roadside	434523	333311	NO2	N	N/A	1.9	No	1.8

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)
	Avenue, Sunny Hill.									
APS1	Allenton Primary School, Brookhouse Street, Allenton	Roadside	436839	332452	NO2	N	N/A	2.4	No	1.8
AIS1	Alvaston Infant School, Elvaston Lane, Alvaston	Roadside	439020	333134	NO2	N	N/A	1.9	No	1.8
BWP1	Borrow Wood Primary School, Arundel Drive, Spondon	Roadside	440734	336067	NO2	N	N/A	0.9	No	1.8
BLP1	Bishop Lonsdale Primary School, St Albans Road, Warwick Avenue	Roadside	433968	335166	NO2	N	N/A	2.0	No	1.8
CSA1	Castleward Spencer Academy, Canal Street	Roadside	435922	335562	NO2	N	N/A	2.3	No	1.8
CTHP1	Cherry Tree Hill Primary School, Sunny Grove, Chaddesden	Roadside	438508	336350	NO2	N	N/A	0.9	No	1.8
HPA1	Hackwood Primary Academy, Starflower Way, Mickleover	Roadside	430621	336227	NO2	N	N/A	2.0	No	1.8

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)
HPS1	Hardwick Primary School, Hastings Street, Normanton	Roadside	435111	334442	NO2	N	N/A	2.4	No	1.8
RJS1	Ravensdale Junior School, Devonshire Drive, Mickelover	Roadside	431245	335379	NO2	N	N/A	2.1	No	1.8
RPP1	Reigate Park Primary School, Reigate Drive, Mackworth	Roadside	431947	337193	NO2	N	N/A	1.9	No	1.8
ARCA1	St Albans RC Academy, Oakleigh Avenue, Chaddesden	Roadside	437775	336773	NO2	N	N/A	2.0	No	1.8
TBS1	The Bemrose School, Rowditch Avenue	Roadside	433734	335694	NO2	Y - No.1 Ring Roads	N/A	2.1	No	1.8

Notes:

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

(2) N/A if not applicable.

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
UKA00630	435763	336306	Roadside	88.8	88.8	35.0	26.0	26.0	27.0	25.0

☐ **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%).

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

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
AB1	434846	335657	Roadside	100.0	98.7	24.0	27.6	24.8	27.3	24.5
AR1	433633	336850	Roadside	100.0	98.7	30.8	31.1	33.3	27.5	28.9
AR2	433459	336918	Roadside	100.0	98.7	22.2	22.3	21.2	21.2	19.1
AR3	433796	336786	Roadside	100.0	98.7	20.5	21.3	21.1	20.3	17.9
AS1	434545	336570	Roadside	75.0	75.0	25.1	25.5	27.0	25.6	25.0
AS2	434579	336571	Roadside	100.0	98.7	23.6	25.6	23.1	21.7	23.0
BR1	435764	336306	Urban Background	83.3	83.0	28.4	31.5	34.0	29.2	29.2
BUR1	434785	335241	Roadside	58.3	58.5	25.2	28.1	26.2	26.8	27.5
BUR2	435025	335508	Roadside	100.0	98.7	28.8	27.6	27.5	29.3	27.4
CAV1	434820	336505	Roadside	100.0	98.7	17.8	18.6	17.5	17.6	18.4
CC1	435725	335802	Kerbside	75.0	75.0	18.8	20.1	19.8	18.9	18.2
CH1	435496	336294	Urban Centre	75.0	75.0	19.9	19.1	20.3	18.3	15.6
CM1	435262	336157	Roadside	83.3	80.1	16.8	17.4	18.5	14.8	15.7
DER1	438942	335864	Roadside	100.0	98.7	24.6	24.9	24.8	23.8	22.8
DR1	434814	337041	Roadside	100.0	98.7	19.9	22.0	20.6	20.0	19.8
DR2	434937	336916	Roadside	91.7	91.6	21.7	23.8	23.1	21.4	22.1
EG1	436064	336487	Roadside	83.3	83.6	31.1	35.3	32.1	30.1	31.9
FG1	434718	336375	Roadside	100.0	98.7	21.5	23.3	23.5	21.5	19.6
FG2	434450	336523	Roadside	100.0	98.7	23.3	26.2	26.8	24.9	23.6
GC1	439776	335696	Roadside	100.0	98.7	18.7	19.8	18.8	18.1	18.2
HL1	437382	336044	Roadside	100.0	98.7	21.3	21.3	20.5	23.0	19.0
HS1	437196	334410	Roadside	100.0	98.7	22.8	26.2	25.8	22.9	21.6
KL1	440206	335650	Roadside	100.0	98.7	19.4	20.0	19.7	18.7	17.2
KL2	440198	335611	Roadside	100.0	98.7	16.7	18.3	17.1	16.5	15.7
KR1	434775	337086	Roadside	100.0	98.7	20.9	23.1	23.4	21.4	20.1
LR1	437676	334090	Roadside	100.0	98.7	35.1	38.8	38.7	38.2	39.4
LR2	438162	333654	Roadside	100.0	98.7	26.2	28.2	29.2	28.1	27.9

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
LW1	439647	335575	Roadside	100.0	98.7	19.3	20.3	19.3	19.0	16.2
ML1	435477	336176	Roadside	66.7	63.1	25.1	26.0	24.7	23.4	21.8
MR1	435439	336817	Roadside	50.0	47.2	21.5	25.7	26.3	25.4	26.5
NR1	439899	335348	Roadside	100.0	98.7	32.2	35.4	31.9	31.0	30.7
NR2	436700	336637	Roadside	100.0	98.7	36.2	**42.1**	**41.1**	35.7	36.6
NR3	435795	336625	Roadside	100.0	98.7	23.2	23.2	21.9	22.5	22.2
NR4	435586	336642	Roadside	16.7	17.0	24.8	25.2	22.4	27.0	34.2
NS1	435091	333526	Roadside	91.7	89.2	25.6	34.0	29.4	28.8	27.0
NS2	435022	333581	Roadside	100.0	98.7	29.2	33.6	31.1	30.3	26.9
OPR1	436809	332826	Roadside	100.0	98.7	20.6	23.1	21.2	20.3	21.7
OPR2	435716	333327	Roadside	100.0	98.7	29.5	33.6	31.4	30.2	25.2
OR1	436992	332713	Roadside	100.0	98.7	19.9	22.1	22.0	20.0	20.2
OR2	436046	334857	Roadside	91.7	89.5	26.5	28.0	28.5	28.1	23.8
OR3	435534	335467	Roadside	83.3	82.5	29.2	31.7	30.5	29.2	31.1
OR4	435440	335717	Roadside	83.3	81.9	22.4	26.6	25.5	24.9	24.9
PL1	434364	337881	Urban Background	100.0	98.7	11.1	11.8	10.3	13.4	10.3
RS1	433118	336650	Roadside	83.3	81.7	18.8	19.9	18.7	16.4	16.1
RT1	435653	335706	Roadside	83.3	84.1	24.0	28.9	27.2	27.9	27.9
RW1	438535	333508	Roadside	100.0	98.7	25.4	27.3	25.6	23.9	25.1
SMC1	435203	336779	Roadside	75.0	75.0	28.5	30.7	30.2	27.3	27.5
SMC2	435249	336785	Roadside	100.0	98.7	19.9	25.8	20.6	19.7	18.9
SR1	439789	335412	Roadside	100.0	98.7	21.9	24.8	20.2	19.2	20.3
SS1	434748	336352	Roadside	75.0	75.0	**40.1**	**40.8**	37.6	32.9	35.0
SS2	434766	336329	Roadside	100.0	98.7	21.9	25.6	24.2	22.1	21.2
SS3	434703	336213	Roadside	100.0	98.7	23.1	26.6	25.5	24.3	23.3
SS4	434688	336155	Roadside	91.7	91.1	28.1	32.1	28.5	28.4	27.5
UNR2	433190	335380	Roadside	50.0	50.4	21.9	22.6	21.9	21.0	16.5
UNR3	433186	335327	Roadside	100.0	98.7	21.9	23.2	20.2	21.2	19.4
UNR4	433786	335778	Roadside	100.0	98.7	27.8	31.7	29.3	31.4	26.9
UNR5	433887	335804	Roadside	91.7	91.1	27.1	29.7	26.4	27.2	25.3

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
UNR6	434227	335958	Roadside	100.0	98.7	20.8	23.3	22.2	22.1	21.0
UNR7	434461	336041	Roadside	100.0	98.7	18.5	21.2	19.7	20.0	16.7
UOR1	433877	335850	Roadside	100.0	98.7	23.5	24.0	23.6	22.4	22.0
UOR3	434109	336255	Roadside	100.0	98.7	23.9	23.4	24.2	23.1	23.1
WH1	433161	336692	Roadside	100.0	98.7	19.9	23.1	20.2	17.4	15.3
AKPS1	434523	333311	Roadside	91.7	89.2	-	-	-	15.8	12.3
APS1	436839	332452	Roadside	75.0	75.0	-	-	-	12.7	13.1
AIS1	439020	333134	Roadside	83.3	79.8	-	-	-	13.5	12.6
BWP1	440734	336067	Roadside	83.3	81.7	-	-	-	11.9	8.4
BLP1	433968	335166	Roadside	91.7	89.8	-	-	-	11.5	12.1
CSA1	435922	335562	Roadside	100.0	98.7	-	-	-	19.7	15.9
CTHP1	438508	336350	Roadside	100.0	98.7	-	-	-	13.7	12.9
HPA1	430621	336227	Roadside	100.0	98.7	-	-	-	9.7	9.4
HPS1	435111	334442	Roadside	100.0	98.7	-	-	-	13.0	12.4
RJS1	431245	335379	Roadside	83.3	83.3	-	-	-	10.1	10.2
RPP1	431947	337193	Roadside	91.7	91.1	-	-	-	12.2	9.6
ARCA1	437775	336773	Roadside	75.0	75.0	-	-	-	17.9	13.0
TBS1	433734	335694	Roadside	100.0	98.7	-	-	-	17.4	19.1

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

☒ **Diffusion tube data has been bias adjusted.**

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

Notes:

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

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

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

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

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

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

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A.1 – Trends in Annual Mean NO_2 Concentrations

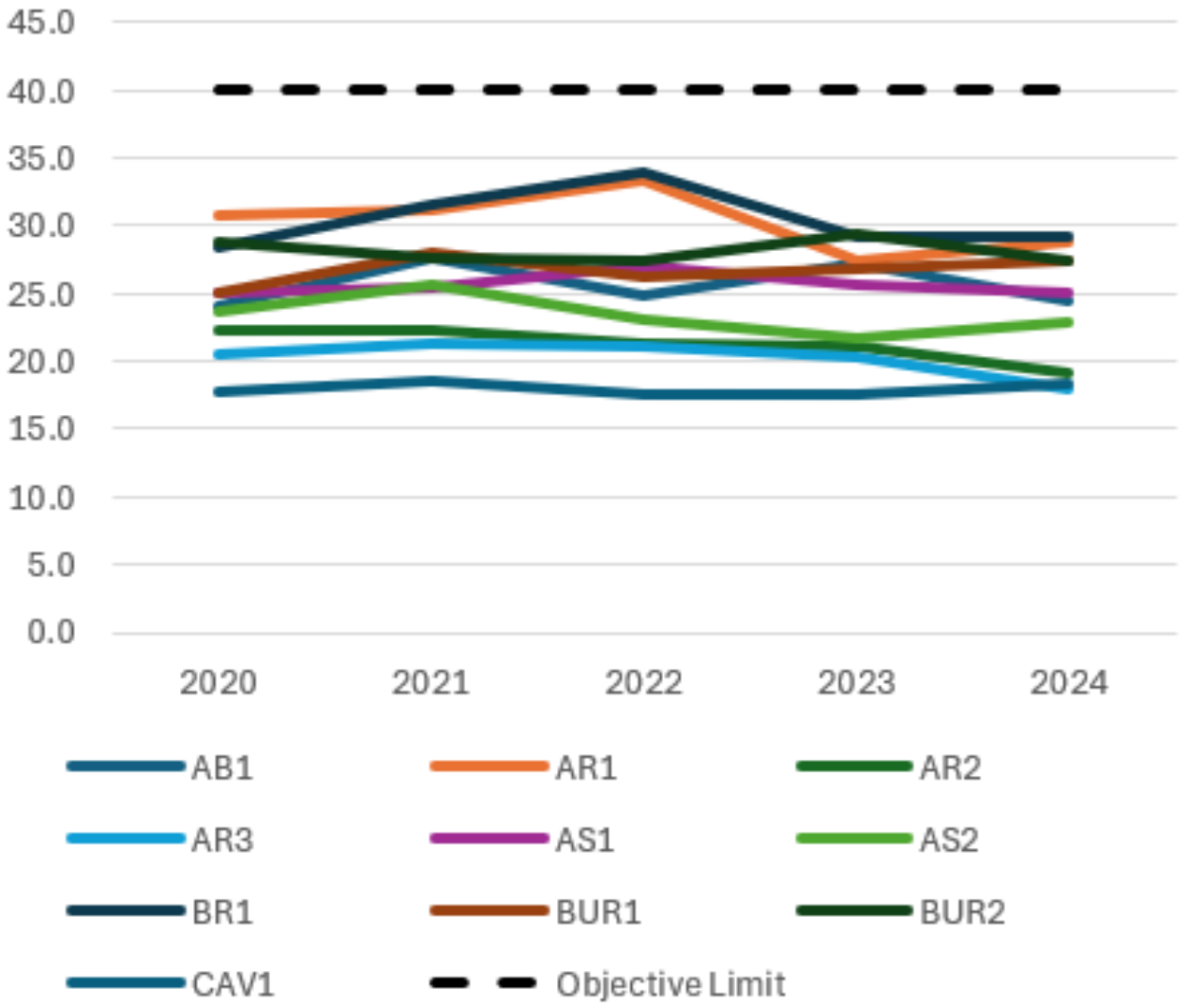

Figure A.2 – Trends in Annual Mean NO_2 Concentrations

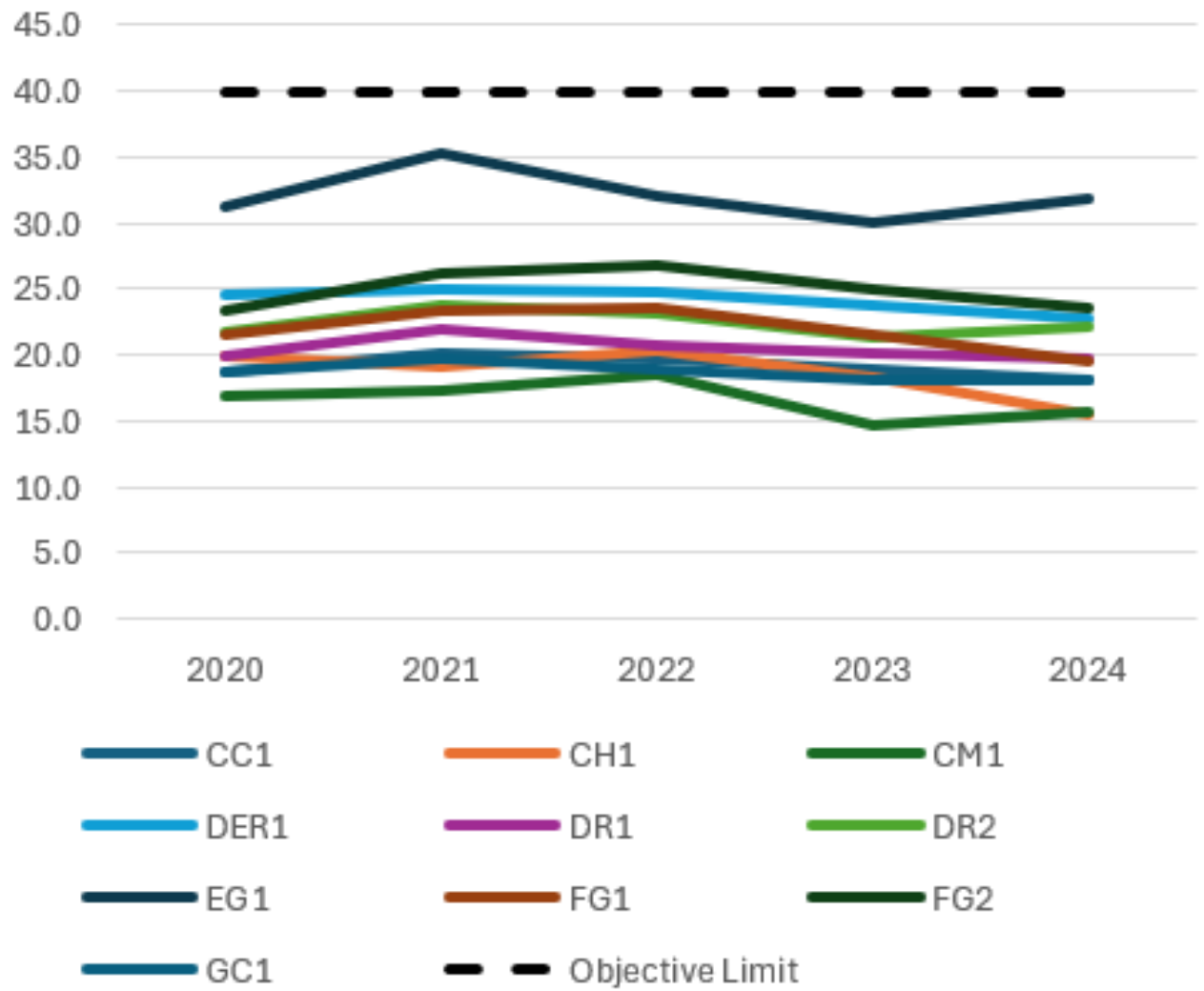

Figure A.3 – Trends in Annual Mean NO_2 Concentrations

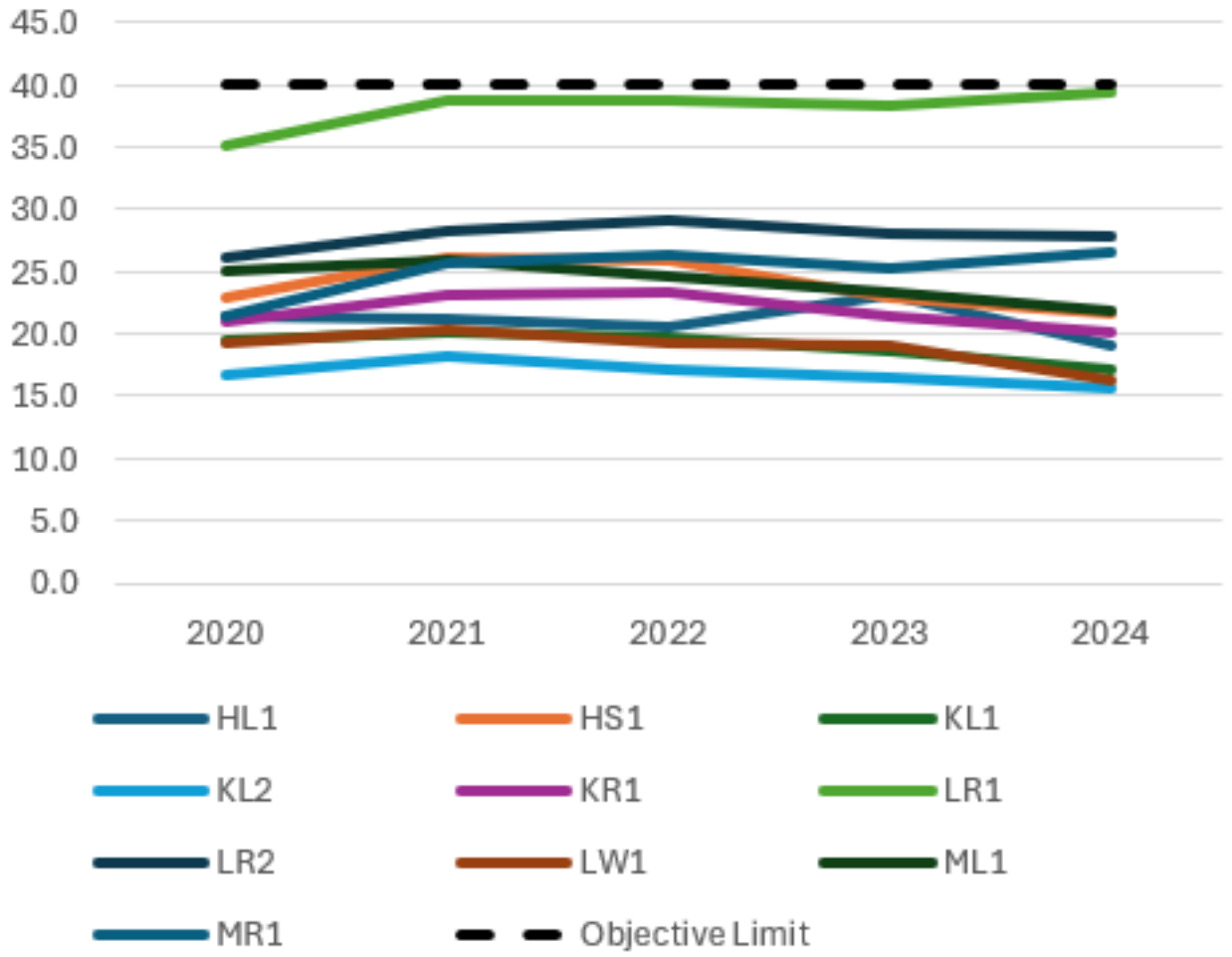

Figure A.4 – Trends in Annual Mean NO_2 Concentrations

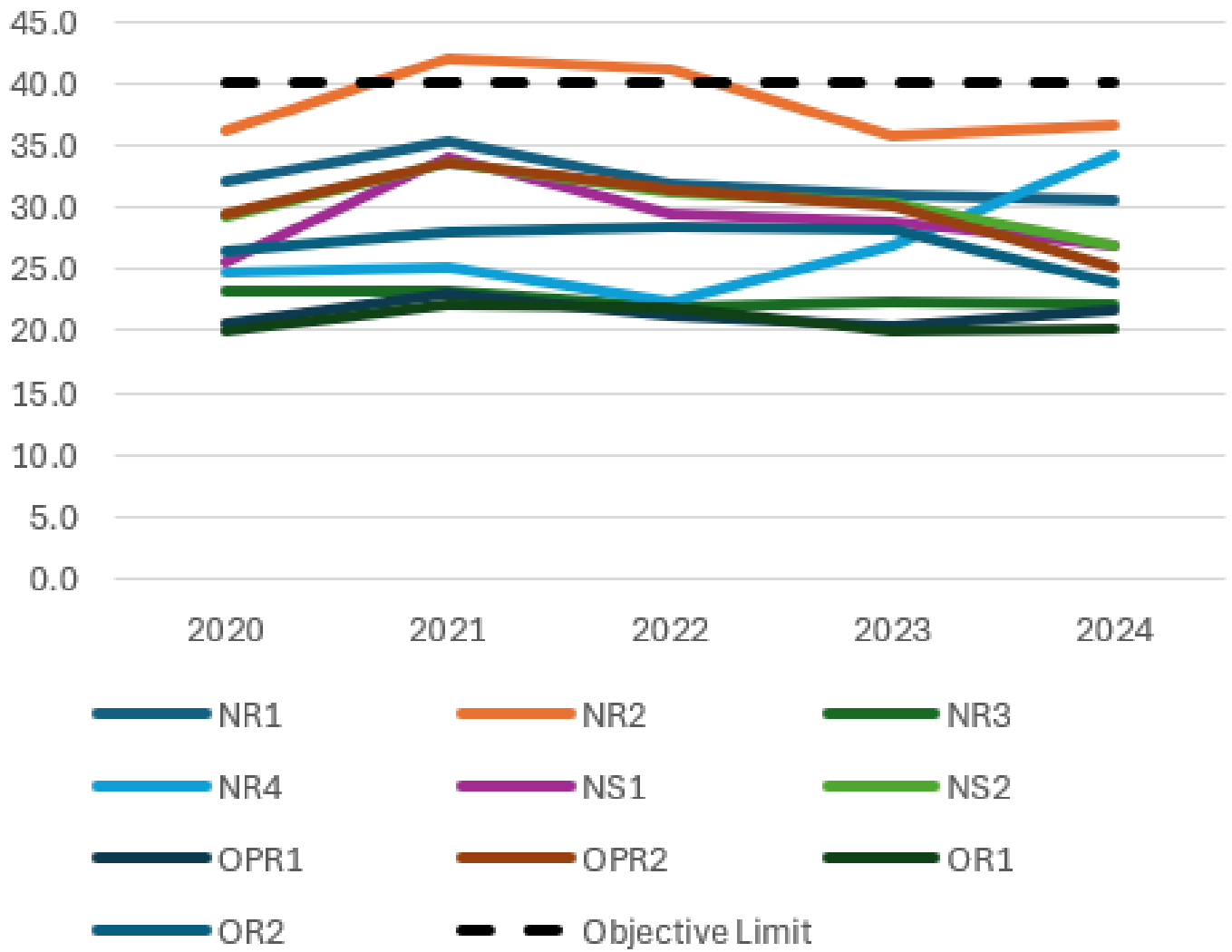

Figure A.5 – Trends in Annual Mean NO2 Concentrations

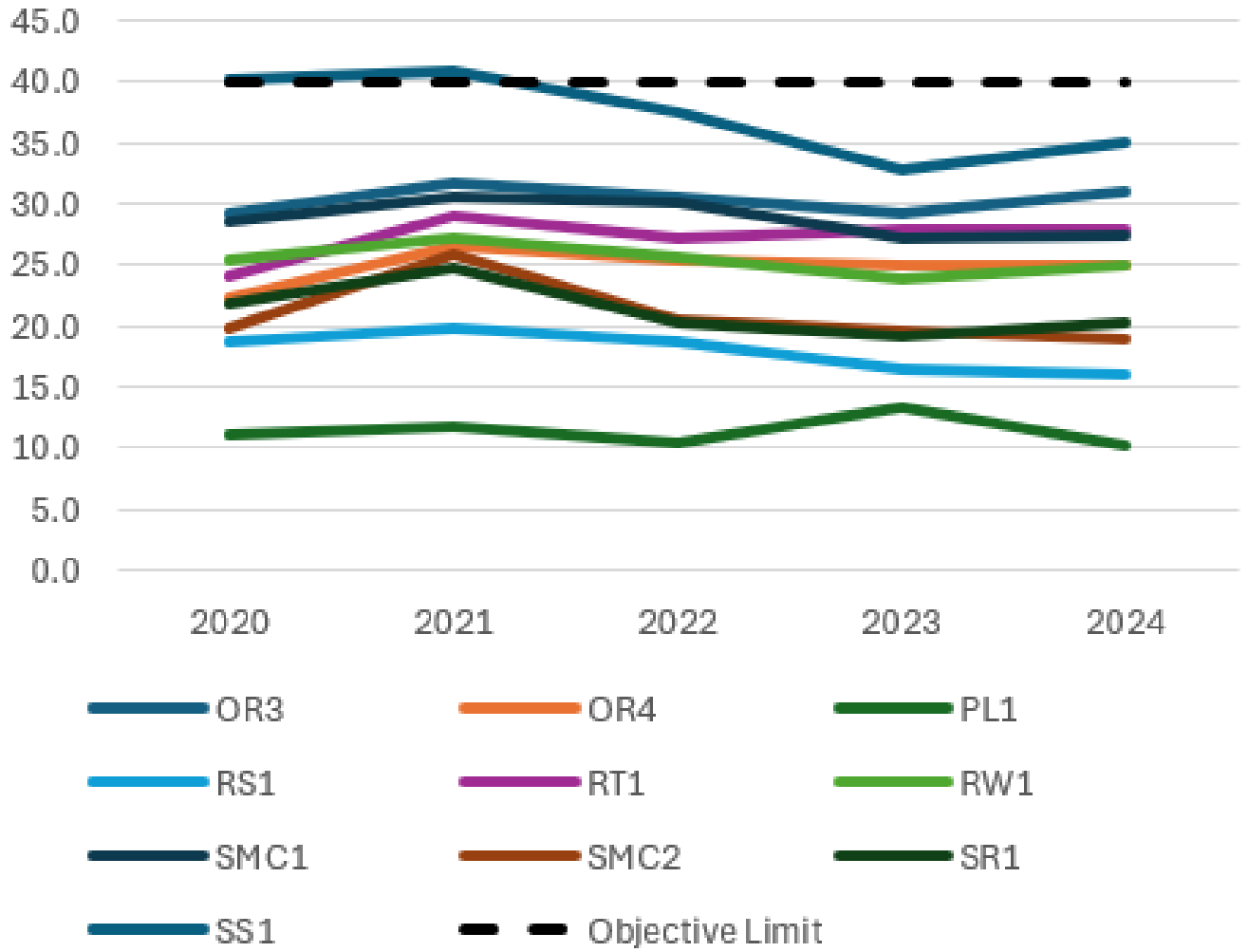

Figure A.6 – Trends in Annual Mean NO2 Concentrations

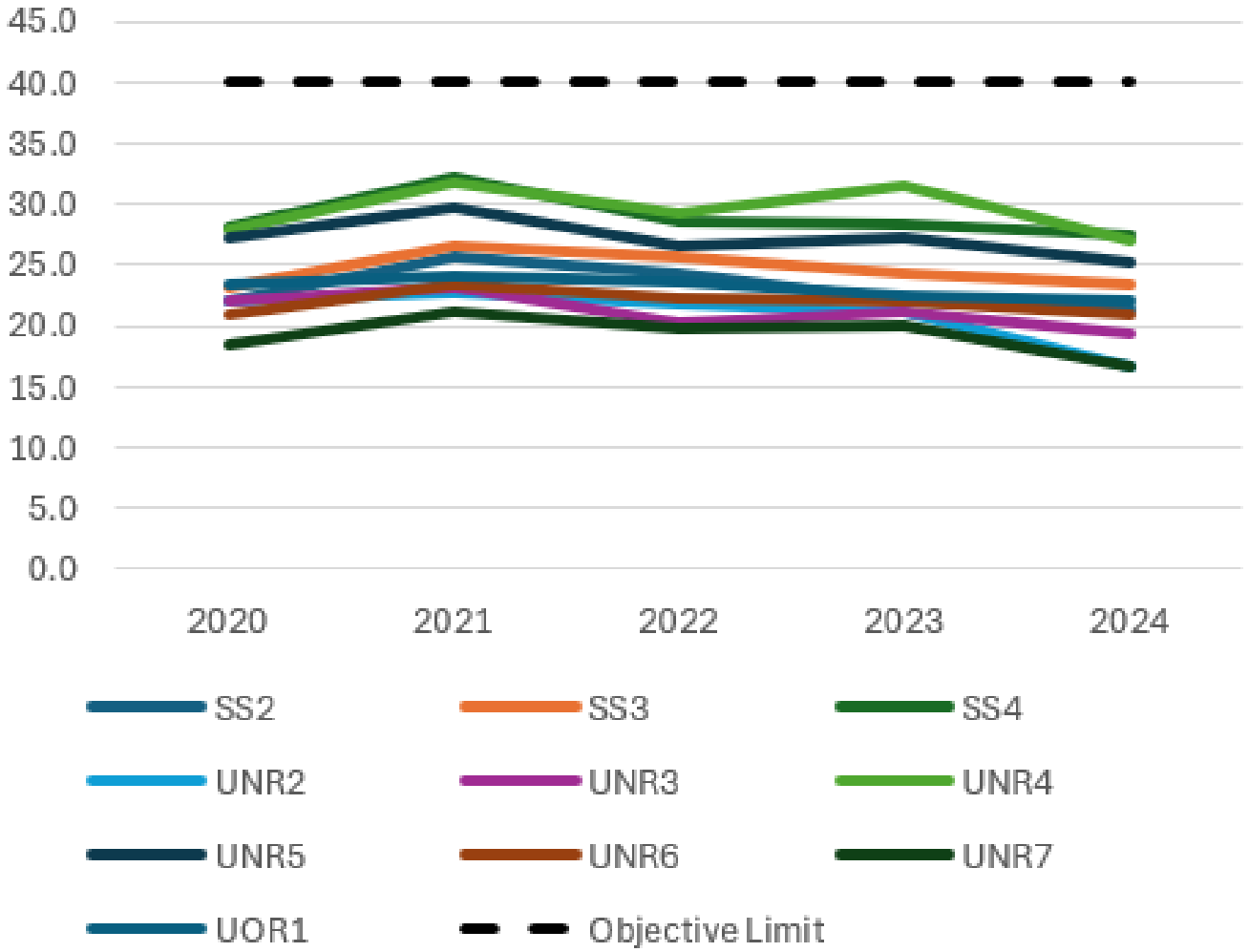

Figure A.7 – Trends in Annual Mean NO2 Concentrations

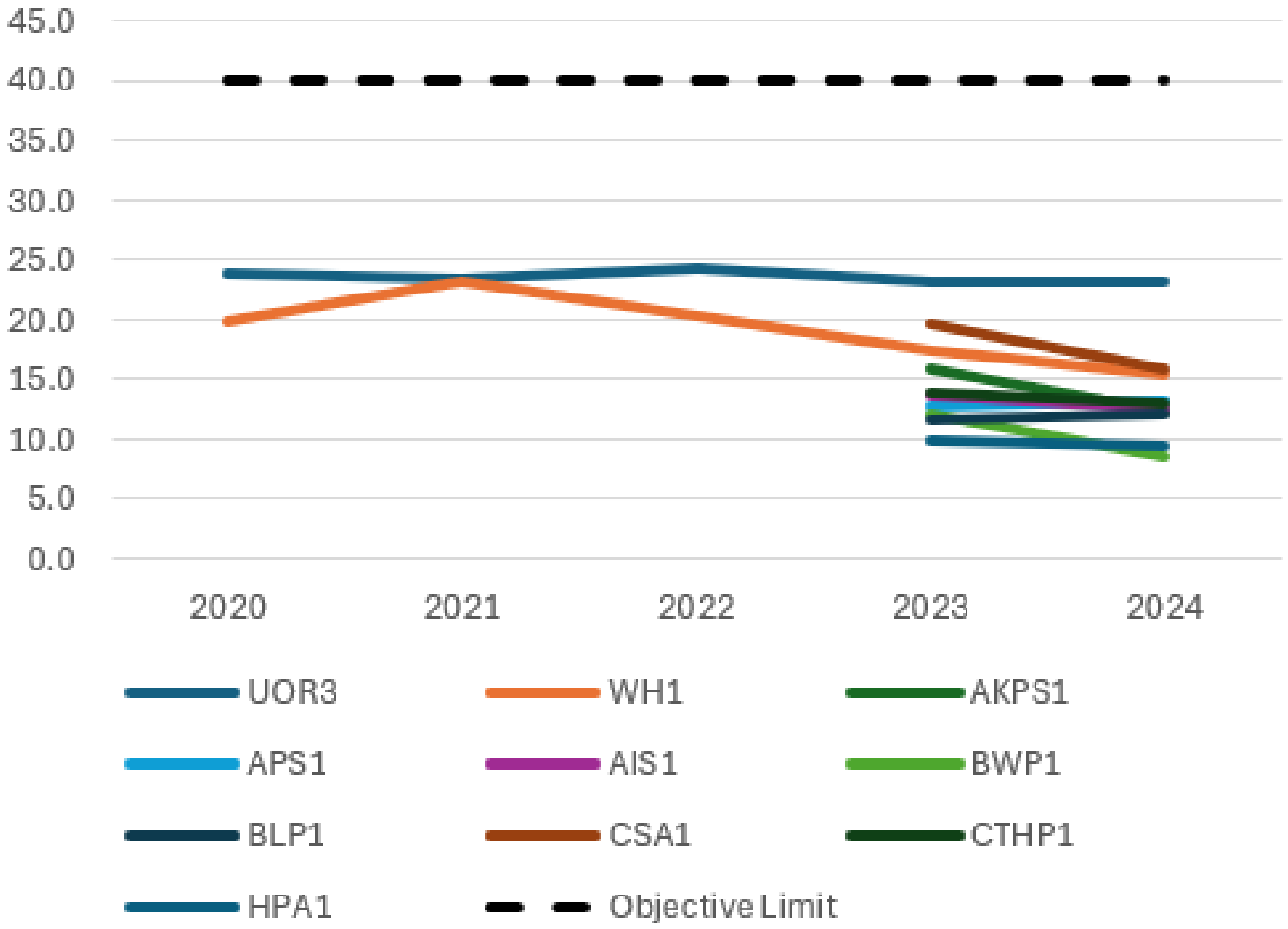

Figure A.8 – Trends in Annual Mean NO2 Concentrations

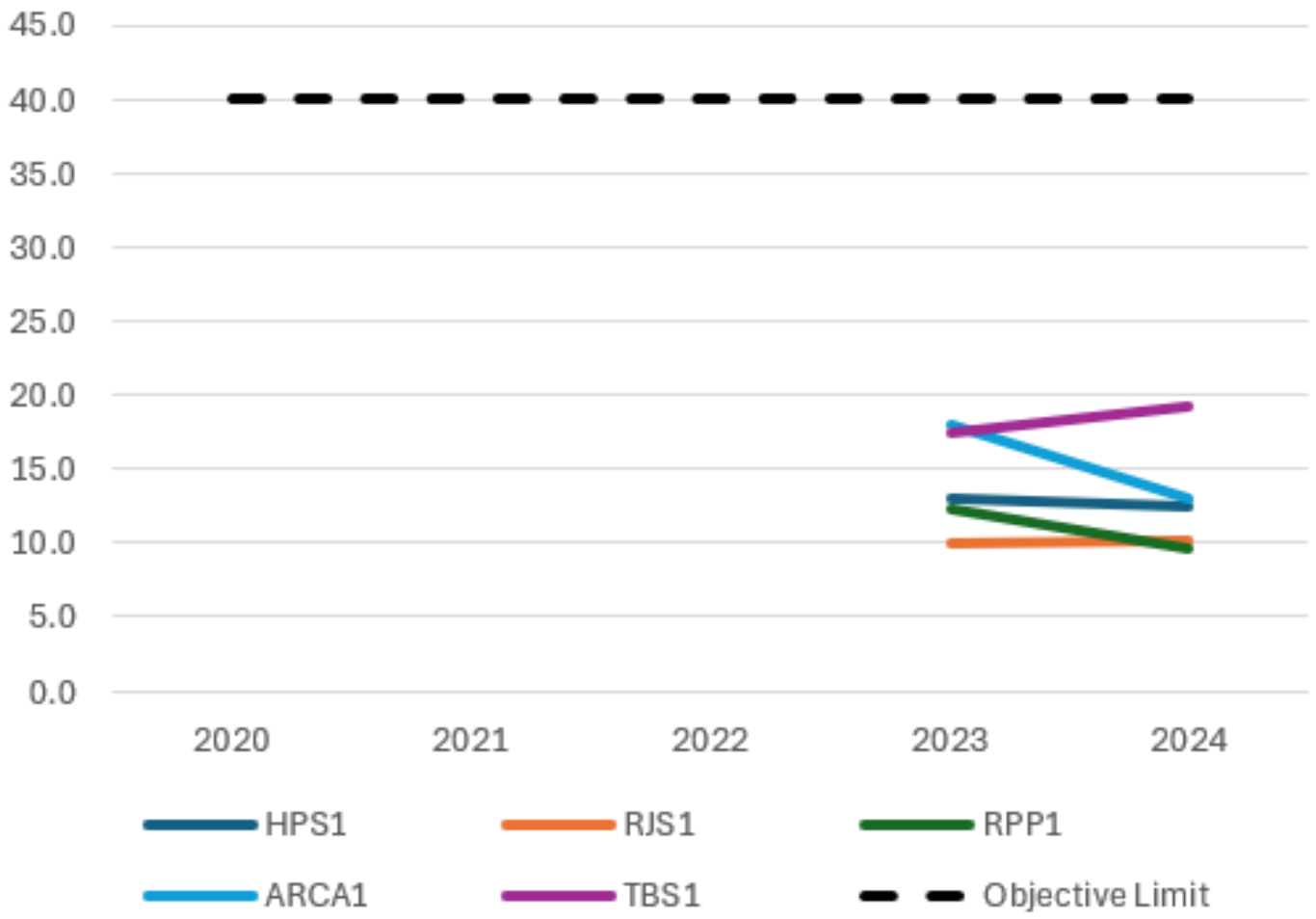

Table A.5 – 1-Hour Mean NO_2 Monitoring Results, Number of 1-Hour Means > 200µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
UKA00630	435763	336306	Roadside	88.8	88.8	0	0	0	0	0

Notes:

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

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

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

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

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
UKA01027	434245	335525	Urban Background	99.3	99.3	-	-	-	-	11.0

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

Notes:

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

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

All means have been "annualised" as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

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

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
UKA01027	434245	335525	Urban Background	99.3	99.3	**-**	-	-	-	0

Notes:

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

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

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

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

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
UKA01027	434245	335525	Urban Background	99.3	99.3	-	-	-	-	7.0

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

Notes:

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

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

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

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

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 (0.78)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
AB1	434846	335657	46.8	38.3	37.0	26.4	36.3	21.8	26.9	20.8	36.5	33.9	33.9	17.6	31.4	24.5		
AR1	433633	336850	41.9	41.9	37.2	30.3	31.7	35.6	33.9	31.9	33.4	37.6	37.6	51.6	37.1	28.9		
AR2	433459	336918	32.9	29.1	20.7	25.4	27.2	29.7	24.6	22.9	26.0	21.0	21.0	12.9	24.5	19.1		
AR3	433796	336786	32.1	25.7	20.0	19.8	21.9	17.4	19.4	14.7	24.1	21.7	21.7	37.2	23.0	17.9		
AS1	434545	336570	37.9				26.8	34.6	30.2	31.0	27.3	32.1	32.1	37.0	32.1	25.0		
AS2	434579	336571	36.5	32.7	27.5	27.2	31.6	24.6	25.3	19.2	30.8	28.9	28.9	40.2	29.5	23.0		
BR1	435764	336306	49.3	40.7	40.4	25.8	30.1	32.6		34.5		39.0	39.0	43.3	37.5	29.2		
BUR1	434785	335241		41.2	36.6			35.9			33.9	35.9	35.9	44.4	37.7	27.5		
BUR2	435025	335508	48.7	45.9	37.8	29.5	32.9	30.4	28.3	26.4	33.5	32.4	32.4	43.4	35.1	27.4		
CAV1	434820	336505	31.0	26.9	23.8	19.0	21.4	20.1	18.2	18.7	20.5	26.5	26.5	30.0	23.6	18.4		
CC1	435725	335802		31.0	17.4		19.9	17.6		18.5	20.9	23.6	23.6	37.5	23.3	18.2		
CH1	435496	336294	27.4	31.7	25.6	8.5	20.3	17.4	15.7	14.3	18.6				19.9	15.6		
CM1	435262	336157	27.1	27.6	23.9	14.3		14.4	14.8	14.8	19.6	22.1	22.1		20.1	15.7		
DER1	438942	335864	38.8	38.5	33.3	22.6	25.5	23.3	22.2	26.8	24.5	30.0	30.0	34.7	29.2	22.8		
DR1	434814	337041	30.7	35.8	31.7	22.1	21.6	16.6	22.6	17.6	23.4	23.1	23.1	36.6	25.4	19.8		
DR2	434937	336916	38.3	35.0	28.9		27.0	16.5	21.5	19.4	26.7	29.0	29.0	40.2	28.3	22.1		
EG1	436064	336487	47.3	40.2	39.1	38.8	42.7			34.8	45.5	38.0	38.0	44.9	40.9	31.9		
FG1	434718	336375	36.6	20.8	30.3	22.0	27.4	18.7	21.6	12.0	22.8	24.2	24.2	41.1	25.1	19.6		
FG2	434450	336523	39.3	34.3	30.6	17.1	32.7	27.9	20.8	23.4	31.5	34.2	34.2	37.0	30.3	23.6		
GC1	439776	335696	27.3	33.1	27.3	18.2	21.5	17.6	17.5	22.5	14.4	29.3	29.3	21.7	23.3	18.2		
HL1	437382	336044	30.7	31.7	29.4	21.9	17.1	20.8	19.2	20.4	11.3	28.9	28.9	31.8	24.3	19.0		
HS1	437196	334410	27.7	26.6	29.7	28.1	25.2	21.9	25.4	22.9	24.7	35.2	35.2	29.8	27.7	21.6		
KL1	440206	335650	23.6	31.2	14.9	18.3	20.0	20.5	17.7	21.0	15.6	26.2	26.2	29.1	22.0	17.2		
KL2	440198	335611	26.5	23.7	20.8	17.3	19.3	15.3	2.0	16.1	17.8	25.3	25.3	32.3	20.1	15.7		
KR1	434775	337086	33.2	31.9	25.8	23.8	25.7	26.1	26.3	24.6	22.5	17.8	17.8	33.0	25.7	20.1		
LR1	437676	334090	51.1	58.9	52.7	45.5	45.0	35.3	41.5	44.4	44.7	60.7	60.7	65.7	50.5	39.4		
LR2	438162	333654	42.1	36.9	34.7	33.2	29.9	36.7	35.8	31.6	33.5	38.7	38.7	37.2	35.8	27.9		

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 (0.78)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
LW1	439647	335575	29.1	32.0	21.7	15.7	19.3	22.8	18.4	18.7	20.7	9.5	9.5	31.9	20.8	16.2		
ML1	435477	336176	38.2	37.1	32.1	24.4		25.8	25.5			28.4	28.4		30.0	21.8		
MR1	435439	336817			35.1	24.8	29.3	24.0	28.5		27.5				28.2	26.5		
NR1	439899	335348	56.0	48.3	44.1	36.7	36.1	31.2	35.1	35.4	33.2	35.7	35.7	44.5	39.3	30.7		
NR2	436700	336637	38.6	55.5	41.7	44.9	46.1	45.9	43.7	36.1	48.1	50.5	50.5	62.1	47.0	36.6		
NR3	435795	336625	36.0	37.0	30.2	24.4	24.0	22.7	21.1	21.6	25.4	29.0	29.0	40.9	28.4	22.2		
NR4	435586	336642	47.1											40.6	43.9	34.2		
NS1	435091	333526	41.0		35.6	34.1	33.8	26.7	28.3	23.7	32.8	40.0	40.0	44.7	34.6	27.0		
NS2	435022	333581	24.2	38.4	34.0	35.5	39.3	31.1	29.3	27.3	30.2	42.4	42.4	39.1	34.4	26.9		
OPR1	436809	332826	30.4	34.1	29.4	23.7	27.8	21.6	23.5	20.7	27.0	32.4	32.4	31.5	27.9	21.7		
OPR2	435716	333327	40.9	37.1	41.9	31.5	30.0	32.7	32.1	33.2	32.7	19.3	19.3	36.7	32.3	25.2		
OR1	436992	332713	38.4	33.0	24.9	28.4	25.5	18.8	21.7	19.6	21.2	22.3	22.3	34.8	25.9	20.2		
OR2	436046	334857	34.1	44.6	40.0	0.7		31.3	31.2	27.2	32.3	25.8	25.8	42.6	30.5	23.8		
OR3	435534	335467	51.5	49.3	40.2	27.6	34.4	39.3	36.7	36.8	37.5			45.6	39.9	31.1		
OR4	435440	335717		39.9	27.7	23.3		24.2	24.5	25.8	31.5	34.1	34.1	54.1	31.9	24.9		
PL1	434364	337881	20.0	16.4	13.7	10.0	9.0	8.2	9.3	8.6	8.9	15.6	15.6	22.5	13.2	10.3		
RS1	433118	336650	35.7	25.4	17.2	17.5	19.6	18.3	19.2			17.4	17.4	19.0	20.7	16.1		
RT1	435653	335706		42.2	38.0		31.3	32.3	31.9	38.2	31.4	31.6	31.6	48.9	35.7	27.9		
RW1	438535	333508	38.9	37.9	34.1	32.4	27.7	28.2	26.6	24.3	32.5	33.9	33.9	35.2	32.1	25.1		
SMC1	435203	336779	37.7	43.3	33.2	25.0	36.5	36.3				30.2	30.2	44.9	35.3	27.5		
SMC2	435249	336785	34.6	34.2	25.7	16.7	21.5	20.6	19.9	19.3	20.0	21.6	21.6	34.6	24.2	18.9		
SR1	439789	335412	33.2	30.0	36.4	23.7	21.0	19.2	17.8	17.1	21.0	28.4	28.4	36.6	26.1	20.3		
SS1	434748	336352	54.6	48.1	42.9	41.7	43.7	46.1	35.8	43.0	47.5				44.8	35.0		
SS2	434766	336329	26.6	35.6	31.7	25.4	29.8	20.2	22.9	21.0	26.7	24.7	24.7	37.6	27.2	21.2		
SS3	434703	336213	41.1	37.8	31.5	26.1	29.6	23.5	21.7	23.5	29.3	28.3	28.3	38.5	29.9	23.3		
SS4	434688	336155		39.7	40.7	33.0	36.6	28.0	28.0	27.9	33.7	34.5	34.5	51.6	35.3	27.5		
UNR2	433190	335380	28.2	33.8	27.5							8.1	8.1	47.2	25.5	16.5		
UNR3	433186	335327	33.0	27.1	22.6	25.4	22.2	19.2	17.1	21.4	22.2	26.3	26.3	36.3	24.9	19.4		
UNR4	433786	335778	37.3	43.4	32.3	34.8	36.2	35.6	30.7	24.8	41.0	32.9	32.9	32.4	34.5	26.9		
UNR5	433887	335804		37.9	37.9	27.6	29.2	23.3	27.6	28.7	26.6	36.8	36.8	44.4	32.4	25.3		
UNR6	434227	335958	33.2	34.2	25.8	25.2	26.1	23.0	22.5	19.3	23.6	27.1	27.1	36.0	26.9	21.0		

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.78)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
UNR7	434461	336041	30.0	30.4	21.4	18.2	21.9	15.9	16.5	16.2	11.3	23.3	23.3	28.1	21.4	16.7		
UOR1	433877	335850	28.9	38.5	28.2	22.6	23.7	26.5	25.0	20.5	27.7	28.2	28.2	39.7	28.1	22.0		
UOR3	434109	336255	38.5	43.0	27.4	18.6	26.4	25.7	23.1	25.4	29.8	28.4	28.4	40.6	29.6	23.1		
WH1	433161	336692	28.1	16.9	16.5	18.3	19.1	16.5	17.1	14.4	20.1	19.6	19.6	28.9	19.6	15.3		
AKPS 1	434523	333311	30.8		15.0	15.2	12.2	11.3	10.0	11.0	14.0	14.0	18.9	20.4	15.7	12.3		
APS1	436839	332452	24.0	27.2		13.6			9.8	11.9	15.0	15.0	16.6	17.8	16.8	13.1		
AIS1	439020	333134	23.7		18.0	16.8	14.1	12.8	12.0	15.6	14.3	14.3	19.5		16.1	12.6		
BWP1	440734	336067			14.7	9.7	9.0	10.4	8.1	12.1	7.4	7.4	14.9	14.0	10.8	8.4		
BLP1	433968	335166	24.1	21.0	14.8	11.8	13.8	11.2	11.7		12.9	12.9	17.3	18.9	15.5	12.1		
CSA1	435922	335562	10.4	31.9	26.2	20.4	19.2	15.6	17.4	17.4	21.2	21.2	27.6	15.5	20.3	15.9		
CTHP 1	438508	336350	23.8	27.9	18.1	13.1	11.5	12.2	11.7	16.2	10.3	10.3	21.1	21.9	16.5	12.9		
HPA1	430621	336227	18.0	17.1	13.0	6.4	9.7	12.5	6.9	7.5	12.2	12.2	16.2	13.4	12.1	9.4		
HPS1	435111	334442	14.7	22.8	19.2	10.6	16.9	6.9	12.0	13.2	16.5	16.5	20.0	22.0	15.9	12.4		
RJS1	431245	335379	16.4	18.6	13.4	8.1	9.6	7.2	7.4	8.5		30.1		11.5	13.1	10.2		
RPP1	431947	337193	17.9	18.0	14.1	9.1	10.3		7.7	9.6	10.4	10.4	16.4	11.9	12.3	9.6		
ARCA 1	437775	336773	27.1	27.3	18.0	13.1	11.0	11.6	10.5	12.9			18.3		16.6	13.0		
TBS1	433734	335694	23.4	26.0	22.7	15.9	19.0	16.0	15.2	17.0	52.6	52.6	14.4	19.8	24.6	19.1		

☒ **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.**

☒ **Derby City Council 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 Derby During 2024

Derby City Council has not identified any new sources relating to air quality within the reporting year of 2024, other than the major developments listed in the Executive Summary.

Additional Air Quality Works Undertaken by Derby City Council During 2024

Derby City Council continues to expand the School Safe Havens project, using cameras to enforce ‘School Streets’ outside 14 schools. This is being done to reduce children’s exposure to air pollution during drop-off and pick-up times.

QA/QC of Diffusion Tube Monitoring

Derby City Council’s diffusion tube supplier, SOCOTEC Didcot, have supplied the following information regarding QA/QC:

- The samples have been analysed in accordance with SOCOTEC’s standard operating procedure ANU/SOP/1015. This method meets the guidelines set out in DEFRA’s ‘Diffusion Tubes for Ambient NO_2 Monitoring: Practical Guidance.
- The tubes were prepared by spiking acetone:triethanolamine (50:50) onto the grids prior to the tubes being assembled. The tubes were desorbed with distilled water and the extract analysed using a segmented flow auto analyser with ultraviolet detection.

There were minor deviations from the DEFRA calendar due to resources and practicalities, however all monthly results are time-weighted to account for this.

Diffusion Tube Annualisation

Missing diffusion tubes meant that 4 monitoring locations did not achieve the minimum data requirements (75%) during 2024. The data for these sites have therefore been adjusted to an annual mean, based on the ratio of concentrations during the short-term

monitoring period to those over the 2024 calendar year. Annualisation has utilised data from the four closest urban background monitoring sites whose data are available from the Automatic Urban and Rural Network (AURN; https://uk-air.defra.gov.uk) where there was sufficient annual data capture (>85%); these sites are listed in Table C.1. NR4 also had insufficient data capture and could not be annualised.

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

Site ID	Annualisation Factor Chesterfield Loundsley Green	Annualisation Factor Nottingham Western	Annualisation Factor St. Alkmund's Way	Annualisation Factor Stoke-on-Trent	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean
BUR1	0.9084	0.9657	0.9119	0.9561	0.9355	37.7	35.3
ML1	0.9228	0.9236	0.9262	0.9541	0.9317	30.0	27.9
MR1	1.3032	1.1884	1.1410	1.1790	1.2029	28.2	33.9
UNR2	0.7880	0.8501	0.8270	0.8637	0.8322	25.5	21.2

Diffusion Tube Bias Adjustment Factors

Figure C.1 – Diffusion Tube Bias Adjustment Factor Calculation

National Diffusion Tube Bias Adjustment Factor Spreadsheet — Spreadsheet Version Number: 06/25

Follow the steps below in the correct order to show the results of relevant co-location studies
Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods
Whenever presenting adjusted data, you should state the adjustment factor used and the version of the spreadsheet
This spreadsheet will be updated every few months: the factors may therefore be subject to change. This should not discourage their immediate use.

This spreadsheet will be updated at the end of September 2025
LAQM Helpdesk Website

The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory.

Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.

Step 1: Select the Laboratory that Analyses Your Tubes from the Drop-Down List — If a laboratory is not shown, we have no data for this laboratory.

Step 2: Select a Preparation Method from the Drop-Down List — If a preparation method is not shown, we have no data for this method at this laboratory.

Step 3: Select a Year from the Drop-Down List — If a year is not shown, we have no data[2]

Step 4: Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor[3] shown in blue at the foot of the final column.

If you have your own co-location study then see footnote[4]. If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953

Analysed By[1]	Method (To undo your selection, choose (All) from the pop-up list)	Year[2] (To undo your selection, choose (All))	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m^3)	Automatic Monitor Mean Conc. (Cm) (µg/m^3)	Bias (B)	Tube Precision[5]	Bias Adjustment Factor (A) (Cm/Dm)
SOCOTEC Didcot	50% TEA in acetone	2024	R	Wrexham County Borough Council	10	15	13	17.0%	G	**0.85**
SOCOTEC Didcot	50% TEA in acetone	2024	UB	Gravesham Borough Council	11	21	19	9.7%	P	**0.91**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Slough Borough Council	11	35	24	43.5%	G	**0.70**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Slough Borough Council	11	26	20	32.6%	G	**0.75**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Slough Borough Council	11	23	17	34.0%	G	**0.75**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Slough Borough Council	10	31	23	33.4%	G	**0.75**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Slough Borough Council	11	30	23	33.7%	G	**0.75**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Thanet Distric Council	10	19	15	24.3%	G	**0.80**
SOCOTEC Didcot	50% TEA in acetone	2024	UB	Wirral Council	9	14	12	19.9%	G	**0.83**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Derry City And Strabane District Council	11	28	32	-11.8%	G	**1.13**
SOCOTEC Didcot	50% TEA in acetone	2024	UB	Derry City And Strabane District Council	11	11	7	58.1%	G	**0.63**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Horsham District Council	11	22	17	31.1%	G	**0.76**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Leeds City Council	10	36	28	32.5%	G	**0.75**
SOCOTEC Didcot	50% TEA in Acetone	2024	KS	Leeds City Council	11	29	20	42.7%	G	**0.70**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Leeds City Council	11	24	18	36.4%	G	**0.73**
SOCOTEC Didcot	50% TEA in Acetone	2024	UC	Leeds City Council	10	25	19	31.2%	G	**0.76**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Huntingdonshire District Council	10	28	23	21.1%	G	**0.83**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	North East Lincolnshire Council	11	39	21	84.1%	G	**0.54**
SOCOTEC Didcot	50% TEA in Acetone	2024	UB	North East Lincolnshire Council	10	12	10	20.0%	G	**0.83**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	North East Lincolnshire Council	11	21	18	15.7%	G	**0.86**
SOCOTEC Didcot	50% TEA in Acetone	2024	UI	North Lincolnshire Council	11	13	11	17.3%	P	**0.85**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Horsham District Council	10	20	16	26.6%	G	**0.79**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Horsham District Council	11	21	16	27.0%	G	**0.79**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Vale Of White Horse District Council	11	19	13	44.9%	G	**0.69**
SOCOTEC Didcot	50% TEA in acetone	2024		**Overall Factor[3] (37 studies)**				**Use**		**0.78**

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.

Derby City Council have applied a national bias adjustment factor of 0.78 to the 2024 monitoring data. A summary of bias adjustment factors used by Derby City Council 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	National	06/25	0.78
2023	National	03/24	0.77
2022	National	03/23	0.76
2021	National	03/22	0.78
2020	National	03/21	0.77

NO_2 Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO_2 concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO_2 fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO_2 concentrations corrected for distance are presented in Table B.1.

No diffusion tube NO_2 monitoring locations within Derby City Council required distance correction during 2024.

QA/QC of Automatic Monitoring

The automatic monitors in Derby City Council's administrative area are managed by Bureau Veritas and run by DEFRA. Derby City Council are not involved with QA/QC of the monitors.

NO_2 Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO_2 concentration at the nearest location relevant for exposure has been estimated using the NO_2 fall-off with distance calculator available on the LAQM Support website. Where appropriate, automatic annual mean NO_2 concentrations corrected for distance are presented in Table A.3.

No automatic NO_2 monitoring locations within Derby City Council required distance correction during 2024.

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

Maps of monitoring locations and AQMAs within the Derby City Council administrative area are available at: http://maps.derby.gov.uk.

Please select the menu in the top left-hand corner Map Features > Air Quality Management Data > ‘Air Quality Management Areas’ and ‘Air Quality Monitoring Data’ to show locations of monitors in relation to AQMAs.

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England[2]

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

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

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
ASR	Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by National Highways
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO_2	Sulphur Dioxide

References

- Local Air Quality Management Technical Guidance LAQM.TG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Local Air Quality Management Policy Guidance LAQM.PG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Chemical hazards and poisons report: Issue 28. June 2022. Published by UK Health Security Agency
- Air Quality Strategy – Framework for Local Authority Delivery. August 2023. Published by Defra.