

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

Report for: St Albans City and District Council

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June 2025



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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Executive Summary: Air Quality in Our Area

Air Quality in St Albans

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.

St Albans City & District Council is located in Hertfordshire, east of Hemel Hempstead and 20 miles from northwest London. St Albans is mainly a rural area, but has three urban towns: St Albans, Harpenden, and Wheathampstead.

The main source of air pollution in the district is from road transport. The resultant main pollutant of concern is Nitrogen Dioxide (NO₂). A number of main A roads (A4147, A5183 and A1081) pass through St Albans City & District Council. The M25 runs east to west

through the southern area of the District. The M1 runs north to south through the western area of the District and the A414 (North Orbital Road) provides a link between the M25 and M1.

During 2024, 4 out of 50 passive monitoring locations recorded an increase in annual mean NO₂ concentrations from 2023. There were no reported exceedances of the annual mean NO₂ UK Air Quality Strategy (AQS) objective of 40 µg/m³.

Air Quality Management Areas (AQMAs) can be declared when there is an exceedance, or likely exceedance, of an air quality objective. St Albans City & District Council currently have one declared AQMA (AQMA No.1) within the Council boundaries. This AQMA covers the area comprising of odd numbered residences and buildings 1-7 London Road, 1-11c Holywell Hill and even numbered residences along London Road. The AQMA was declared in 2004 due to exceedances of the NO₂ annual mean AQS objective (40 μg/m³) and the PM₁₀ 24-hour concentration objective (50 μg/m³ not to be exceeded more than 35 times/year). Further details of this AQMA may be found on the UK Air website.

St Albans' Air Quality Action Plan (AQAP) was updated in 2024¹ and progress on existing measures was last updated in the 2024 ASR. An AQAP is a mandatory requirement for any local authorities who report exceedances of one or more of the UK AQS objectives and should describe the manner in which the local authority in collaboration with partners will work toward bettering air quality in the area. Following the development of a new AQAP, the new set of actions is included in this report, as shown in Table 2-2. The AQAP is intended to be a set of actions aimed at improving air quality within active AQMAs and by extension, the District as a whole. The new AQAP comprises a set of action areas, these are:

- Environmental Measures
- Transport Measures
- Health, Education and Awareness measures

https://www.stalbans.gov.uk/sites/default/files/Air%20Quality%20Action%20Plan.pdf

¹ St Albans AQAP, February 2024:

Actions to Improve Air Quality

Whilst air quality has improved significantly in recent decades, there are some areas where local action is needed to protect people and the environment from the effects of air pollution.

The Environmental Improvement Plan² sets out actions that will drive continued improvements to air quality and to meet the new national interim and long-term targets for fine particulate matter (PM_{2.5}), the pollutant of most harmful to human health. The Air Quality Strategy³ provides more information on local authorities' responsibilities to work towards these new targets and reduce fine particulate matter in their areas.

The Road to Zero⁴ details the Government's approach to reduce exhaust emissions from road transport through a number of mechanisms, in balance with the needs of the local community. This is extremely important given that cars are the most popular mode of personal travel and the majority of AQMAs are designated due to elevated concentrations heavily influenced by transport emissions.

Conclusions and Priorities

In the monitoring period of 2024, there were no exceedances of any of the relevant NO₂ UK AQS objectives. As such, compliance with the objectives has been maintained in the St Albans City & District Council. St Albans City & District Council will continue to focus on the reduction of NO₂ concentrations through their new AQAP. The Council's priorities for the next reporting year are:

- Publish the new AQAP;
- Continue working with neighbouring local authorities to improve air quality;
- Continue to monitor NO₂ and review the network regularly to ensure efficiency of monitoring.

² Defra. Environmental Improvement Plan 2023, January 2023

³ Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

⁴ DfT. The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy, July 2018

How to get Involved

At an individual level there are a number of ways the public are able to get involved and help improve local air quality. The main source of air pollution within St Albans District is vehicle emissions, and changing the method of transport used can help reduce the amount of pollutant emissions released from vehicle sources. This can be from both the reduction in the number of vehicles being used, and through the type of vehicles being used.

Changes in transport use, such as the following, help in reducing emissions of NOx, PM₁₀ and PM_{2.5} from vehicle sources:

- Use public transport where available This reduces the number of private vehicles in operation reducing pollutant concentration through the number of vehicles and reducing congestion;
- Walk or cycle if your journey allows it Choosing to walk or cycle for your journey reduces the number of vehicles on the road. There is the added benefit of keeping fit and healthy. In addition, many of the cycle routes are off-road meaning you are not in close proximity to emissions from road traffic sources;
- Reduce time of idling vehicles If using a car for a journey avoid idling. When it is
 apparent there will be no movement required then switch the engine off to reduce
 the amount of pollutant emissions released;
- Car/lift sharing Where a number of individuals are making similar journeys, such
 as travelling to work or to school, car sharing reduces the number of vehicles on the
 road and therefore the amount of emissions being released. This can be promoted
 via travel plans through the workplace and within schools; and
- Alternative fuel / more efficient vehicles Choosing a vehicle that meets the specific needs of the owner; fully electric, hybrid fuel, and more fuel efficient cars are available, and all have different levels of benefits by reducing the amount of emissions being released.

The St Albans Greener Together initiative, formed by the Council and the University of Hertfordshire, aims to provide a platform where local experts may provide advice on initiatives suggested by individuals, businesses or community groups. It is also a platform to seek support for these ideas, and the opportunity may be afforded to apply for funding to implement suggested actions. As part of the network, members can share ideas and experiences and help other members creating a motivated, interconnected District with a

united focus on addressing sustainability issues and enacting meaningful local change. Find out more and join today on the <u>St Albans Greener Together website</u>.

Real time and historical air quality data for Hertfordshire and Bedfordshire is presented at www.airqualityhertsbeds.co.uk; including an index related legend so users can follow the current air quality. There are also a number of links providing further information, including the legislation of air quality within the UK, diffusion tube data, previous LAQM reports, and graphical representations of data across the region. Up to date diffusion tube data and news relating to air quality within the District can be found on the St Albans City and District website at https://www.stalbans.gov.uk/environmental-services.

Table of Contents

L	ocal Re	esponsibilities and Commitment	i
Ex	ecutive	Summary: Air Quality in Our Area	iii
P	ir Quali	ity in St Albans	iii
P	ctions t	to Improve Air Quality	v
(Conclusi	ions and Priorities	v
H	low to g	get Involved	vi
1	Local	Air Quality Management	1
2	Actio	ns to Improve Air Quality	2
2.1	Air	Quality Management Areas	2
2.2 Dis	Pro	gress and Impact of Measures to address Air Quality in St Albans Council	ity &
2.3 Co		_{2.5} – Local Authority Approach to Reducing Emissions and/or ations	16
3 Na		uality Monitoring Data and Comparison with Air Quality Objectives a	
3.1	Sur	nmary of Monitoring Undertaken	19
	3.1.1	Automatic Monitoring Sites	19
	3.1.2	Non-Automatic Monitoring Sites	19
3.2	Indi	ividual Pollutants	19
	3.2.1	Nitrogen Dioxide (NO ₂)	19
	3.2.2	Particulate Matter (PM ₁₀)	20
	3.2.3	Particulate Matter (PM _{2.5})	20
	3.2.4	Sulphur Dioxide (SO ₂)	20
4	Plann	ning Applications	21
Аp	pendix	A: Monitoring Results	28
Аp	pendix	B: Full Monthly Diffusion Tube Results for 2024	48
_	-	C: Supporting Technical Information / Air Quality Monitoring Data	
		hanged Sources Identified Within St Albans City & District Council D	
		al Air Quality Works Undertaken by St Albans City & District Council	
QA	/QC of	f Diffusion Tube Monitoring	51
		on Tube Annualisation	
	Diffusio	on Tube Bias Adjustment Factors	53
	NO ₂ Fa	all-off with Distance from the Road	54
Аp	pendix	D: Maps of Monitoring Locations and AQMAs	55
_	_	ε Ε: Summary of Air Quality Objectives in England	
_			

Glossary of Terms	66
References	67

Figures

Figure 2-1 Maximum background annual mean PM _{2.5} concentration in St Albans, μg/m	3,
2021 to 2040	17
Figure 2-3 Source apportionment for $PM_{2.5}$ concentrations in St Albans centre, 2025	17
Figure A.1 – Trends in Annual Mean NO ₂ Concentrations, AQMA No.1	37
Figure A.2 – Trends in Annual Mean NO ₂ Concentrations, St Albans Centre (excluding	l
AQMA No. 1)	38
Figure A.3 – Trends in Annual Mean NO ₂ Concentrations, Potters Crouch	39
Figure A.4 – Trends in Annual Mean NO ₂ Concentrations, Frogmore	40
Figure A.5 – Trends in Annual Mean NO ₂ Concentrations, Napsbury	41
Figure A.6 – Trends in Annual Mean NO2 Concentrations, St Albans East	42
Figure A.7 – Trends in Annual Mean NO ₂ Concentrations, St Albans North	43
Figure A.8 – Trends in Annual Mean NO ₂ Concentrations, Harpenden	44
Figure A.9 – Trends in Annual Mean NO ₂ Concentrations, Redbourn	45
Figure A.10 – Trends in Annual Mean NO_2 Concentrations, Wheathampstead	46
Figure A.11 – Trends in Annual Mean NO ₂ Concentrations, Bricket Wood	47
Figure D.1 – Map of Non-Automatic Monitoring Site, AQMA 1 and St Albans Centre	55
Figure D.2 – Map of Non-Automatic Monitoring Site, Potters Crouch	56
Figure D.3 – Map of Non-Automatic Monitoring Site, Frogmore	57
Figure D.4 – Map of Non-Automatic Monitoring Site, Napsbury	58
Figure D.5 – Map of Non-Automatic Monitoring Site, St Albans East	59
Figure D.6 – Map of Non-Automatic Monitoring Site, St Albans North	60
Figure D.7 – Map of Non-Automatic Monitoring Site, Harpenden	61
Figure D.8 – Map of Non-Automatic Monitoring Site, Redbourn	62
Figure D.9 – Map of Non-Automatic Monitoring Site, Wheathampstead	63
Figure D.10 – Map of Non-Automatic Monitoring Site, Bricket Wood	64

Tables

Table 2-1 – Declared Air Quality Management Areas	3
Table 2-2 – Progress on Measures to Improve Air Quality	7
Table 4-1 – Major Applications Received Between 01/01/2024 and 25/04/2025	21
Table A.1 – Details of Non-Automatic Monitoring Sites	28
Table A.2 – Annual Mean NO $_{2}$ Monitoring Results: Non-Automatic Monitoring ($\mu g/m^{3}$)	33
Table B.1 – NO ₂ 2024 Diffusion Tube Results (μg/m³)	48
Table C.1 – Annualisation Summary (concentrations presented in μg/m³)	53
Table C.2 – Bias Adjustment Factor	53
Table E.1 – Air Quality Objectives in England	65

1 Local Air Quality Management

This report provides an overview of air quality in St Albans City & District 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 St Albans City & District 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 St Albans City & District Council is provided in Table 2-1. The table presents a description of the AQMA that is currently designated within St Albans City & District Council. Appendix D: Maps of Monitoring Locations and AQMAs provides maps of AQMA and the air quality monitoring locations in relation to the AQMA. The air quality objectives pertinent to the current AQMA designation are as follows:

- NO₂ annual mean;
- PM₁₀ 24-hour mean.

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
St Albans AQMA No. 1	Declared 02/11/2004, Amended 08/07/2009	NO₂ Annual Mean	The area comprising of odd numbers 1-7 London Road, 1-11c Holywell Hill and even numbers London Road, St Albans.	NO	61 μg/m³	No exceedance	4	Air Quality Action Plan for St Albans City and District Council December 2003	Air Quality Action Plan – 2025- 2030
St Albans AQMA No. 1	Declared 02/11/2004, Amended 08/07/2009	PM ₁₀ 24-hour mean	The area comprising of odd numbers 1-7 London Road, 1-11c Holywell Hill and even numbers London Road, St Albans.	NO	-	-	-		

[☑] St Albans City & District Council confirm the information on UK-Air regarding their AQMA(s) is up to date.

[☑] St Albans City & District Council confirm that all current AQAPs have been submitted to Defra.

2.2 Progress and Impact of Measures to address Air Quality in St Albans City & District Council

Defra's appraisal of last year's ASR concluded that the 2024 report is well structured, detailed, and provides the information specified in the Guidance. The following comments are designed to help inform future reports:

- The formatting of the text in chapter 2.1 has gone wrong. This should be amended before publishing the ASR.
- 2. There are very small discrepancies in the data transposition between the Excel data tables and the report. For example, for sites SA109, SA143 and SA146 the data capture differs slightly between the Excel table and the report. Additionally, for SA146, the concentration differs slightly. These discrepancies do not affect the overall conclusions of the report, so should be corrected for future reports.
- 3. It is understood that the Council have updated the 2003 AQAP and that it is due to be published in 2024. It is expected that links to the updated AQAP are provided in the next ASR.
- 4. Chapter 3.2.1 is missing a summary of the NO₂ results and trends in 2023. This should be included in future ASRs.
- 5. While the ASR includes the comments from the previous ASR, it is not included how the Council have addressed these this year. This has also already been highlighted in last year's ASR comments. This should be included in future reports to highlight improvement.
- It is recommended to include a screenshot of the National Diffusion Tube Bias Adjustment Factor Spreadsheet as the live version is updated regularly in future ASRs.
- 7. SACDC have presented NO₂ trends for monitoring locations both inside the AQMAs and outside of the AQMAs. This is extremely useful as it allows the reader to easily understand trends relating to NO₂ within the borough. This approach to data/trend presentation is encouraged for future reports.
- 8. The maps of the AQMA boundaries and the locations of the monitoring sites are clearly shown and labelled. This is good practice and should be continued for future reports.

St Albans City & District Council have taken Defra's appraisal comments from last year's ASR into consideration and have addressed the comments when writing this year's ASR.

St Albans City & District 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. There are 32 measures included within Table 2-2, with the type of measure and the progress St Albans City & District 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 their respective Action Plans.

St Albans City & District Council:

- AQAP 2025-2030
- Sustainability & Climate Crisis Strategy Action Plan

Hertfordshire County Council:

- Air Quality Strategy
- Transport Policy & Local Transport Plan
- Local Cycling and Walking Infrastructure Plan (LCWIP)

A key completed measure is submission and DEFRA acceptance of the Air Quality Action Plan (AQAP) 2025-2030.

St Albans City & District Council expects the following measures to be completed over the course of the next reporting year:

- Publish the new AQAP 2025-2030
- Continue working with neighbouring local authorities to improve air quality
- Continue to monitor NO₂ and review the network regularly to ensure efficiency of monitoring

St Albans City & District Council's priorities for the coming year are:

- Further progress the introduction of additional electric charging at Council car parks and on-street parking locations
- Continue working towards provision of air quality planning guidance for construction sites and operational developments
- Promotion of Hertfordshire Climate Change and Sustainability Partnership (HCCSP)

• Consider implementation of Smoke Control Areas

St Albans City & District Council worked to implement Action Plan measures in partnership with the following stakeholders during 2024:

- Hertfordshire County Council
- Neighbouring Local Authorities, particularly Dacorum Borough Council
- Local Bus Operators

The principal challenges and barriers to implementation that St Albans City & District Council anticipates facing is in funding the implementation of actions in Table 2-2.

St Albans City & District Council anticipates that the measures stated above and in Table 2-2 will achieve compliance in AQMA 1.

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

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
TM2	Investigate introduction of additional electric charging at council car parks and on-street parking locations within the district	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2020	Ongoing	SACDC	SACDC	No	Not Funded	£50k - 100k	Planning	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	Usage figures	Installation of EV Charge Points in Hart Road (4), Cotlandswick Leisure Centre (2) Keyfield terrace (4), London Road (8), Bowers Way (2), Charter Close (2) is complete. SACDC has also installed or is planning to install more charging sites at Jenny Lane, Noke Shot, Cottonmill Community and Cycle Centre, and Civic Centre Opportunities Site (CCOS) South	Hertfordshire County Council will be supporting districts with resources and funding to increase EV charge points in both car parks and on-street parking.
EM7	Air quality planning guidance for construction sites and operational development s	Policy Guidance and Developme nt Control	Air Quality Planning and Policy Guidance	2024/2025	2024/2025	SACDC & HCC Air Quality / Planning Team	Staff costs	No	Funded	-	To be confirme d	Lower NOx & PM emissions from construction sites and developments	Publication of the policy & enforcement of the policy	-	St Albans City & District Council planning buy in/funding for SPG document creation. This could also be promoted through channels such as the Hertfordshire County Council Sustainability Partnership to extend consistent policy for the County
ЕМЗ	Consider implementati on of smoke control areas	Policy Guidance and Developme nt Control	Other policy	2024/2025	2024/2025	SACDC Air Quality Team	Staff costs	No	Funded	-	To be confirme d	Lower PM emissions. Domestic combustion including wood burning contributes 29% of total PM ₁₀ emissions and 44% of total PM _{2.5} emissions in the district.	Implementation of smoke control area(s)	Planning stage	This process will be explored more widely with air quality officers in the county
EM1	Climate Change Carbon Emission Reduction - Hertfordshire Climate Change and Sustainability Partnership (HCCSP)	Policy Guidance and Developme nt Control	Regional Groups Co- ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2024/2025	Ongoing	St Albans City & District Council (SACDC) & Hertfordshire County Council (HCC) departments	Staff costs	No	Funded	-	Active	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	Regular attendance of regular HCCSP meetings	Attending regular meetings	HCC suggest that St Albans City & District Council could promote the Sustainability Partnership work within the scope of this measure to achieve a consistent policy for development across the county and with wider regional partners. The Hertfordshire Growth Board (https://www.hertfordshiregrowthboard.com/docu ments/vision-and-missions/#sec-8) has a strategic goal in the Transport for Herts Mission to: Improve air quality by reducing transport- related emissions. With an action to: Monitor air quality across the county to inform plans and programmes of work.

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
EM2	Links with Air quality and public health - Hertfordshire County Council	Policy Guidance and Developme nt Control	Regional Groups Co- ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2024/2025	Ongoing	SACDC & HCC departments	Staff costs	No	Funded	-	Active	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	Regular attendance of meetings between SACDC and HCC	Attending regular meetings	HCC continues to fund an air quality programme manager. The employment of an air quality manager at the county level has allowed communication with multiple departments, links with highways, public health, schools. It permits a very broad range of facilities to promote and improve air quality awareness
EM4	Investigate development of a domestic solid fuel policy	Policy Guidance and Developme nt Control	Other policy	2024/2025	2024/2025	SACDC Air Quality Team	Staff costs	No	Funded	-	To be confirme d	Lower PM emissions. Domestic combustion including wood burning contributes 29% of total PM10 emissions and 44% of total PM2.5 emissions in the district.	Publication of the policy & enforcement of the policy	_	Local plan policy, supplementary planning documents, and guidance may be considered here.
EM5	Control of Bonfires and use of other unauthorised Fuels	Policy Guidance and Developme nt Control	Other policy	2024/2025	2024/2025	SACDC Air Quality Team	Staff costs	No	Funded	-	To be confirme d	Lower PM emissions. Domestic combustion including wood burning contributes 29% of total PM10 emissions and 44% of total PM2.5 emissions in the district.	Publication of the policy, enforcement of the policy & reduction in nuisance reports	-	
EM6	SACDC will investigate complaints about nuisance (domestic and industrial emissions)	Public Information	Via other mechanisms	-	Ongoing	SACDC Air Quality Team / Environmental Health Officers	Staff costs	No	Funded	£10k - 50k	Active	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	Time taken to resolve complaints	Complaints are investigated as and when received	

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
EM8	Continue to monitor air quality within the district and as necessary review the suitability of monitoring locations	Policy Guidance and Developme nt Control	Air Quality Planning and Policy Guidance	2018	Ongoing	SACDC Air Quality Team	Staff costs	No	Funded	-	Active	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	Data capture	Details of diffusion tube monitoring is recorded on https://www.stalbans.gov.uk/environmental-services	
ЕМ9	Continue the Trees Against Pollution project and explore green wall/hedging opportunities	Transport Planning and Infrastructu re	Other	2018	Ongoing	SACDC Trees & Woodlands / Planning Team	Staff costs	No	Not Funded	-	Active	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	Number of trees planted	Over 10,000 trees given away to residents as part of the HCC tree giveaway initiative in partnership with and part funded by SACDC.	
EM10	All new street infrastructure should take a Healthy Streets approach	Transport Planning and Infrastructu re	Other	2024/2025	2024/2025	SACDC/HCC	Staff costs	No	Funded	-	To be confirme d	-	All new streets perform well against the ten healthy street indicators	HCC support this and have already taken measures to introduce Healthy Streets assessments and concepts into early scheme design.	It is suggested that building in the need for all future development to promote a healthy streets approach through new infrastructure will be a requirement, with consideration of a standard minimum street score, and for the development to contribute to the existing environment and meet the needs for future site users by uplifting existing surrounding and connected streets where this is necessary. This should be done during the early design stages to provide direction and evidence for design decisions. Requirement to take this approach sits with DM and LPA

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
TM1	Electric fleet council vehicles	Alternative use from diesel and petrol vehicles	Emission reduction	2024/2025	2024/2025	SACDC Sustainability	To be determin ed	No	-	£10k - 50k	To be confirme d	Reduce NOx and PM emissions	Number of electric vehicles in council fleet	- New Waste & Recycling vehicles have been delivered (2024). These are mainly diesel as alternative fuelled vehicles, and required infrastructure, are beyond the Council's available budget. The new diesel vehicles are the most efficient available keeping emissions as low as possible. All Vehicles are Euro 6 or above. Working with Veolia, the Council is currently undertaking a feasibility study to determine if Sandridge Gate Depot can support the infrastructure, and space, to maintain a future fully electric fleet Initial discussions with procurement completed and in principle the requirement of a green fleet could be added into procurement strategy but requires further development which is dependent on resources. Aim is to seek approval for a fleet decarbonisation policy by the end of 2025. - All electric parking vehicles - Electric street cleaning vehicle in use by Veolia	All Council fleet will be replaced with ultra-low emission vehicles at end of life or by 2028, starting with Markets vehicles, this will include service vehicles such as parking enforcement (as per St Albans sustainability and climate crisis strategy)
ТМЗ	Improve taxi fleet emissions	Promoting Low Emission Transport	Taxi Licensing conditions	2020	Ongoing	SACDC	SACDC	No	Not Funded	<£10k	Active	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	Certificate of compliance data	Emissions controlled through Certificate of Compliance at garage check. – From 01/04/2022 vehicle licences will not be renewed in respect of any licensed vehicle that does not meet or exceed Euro 5 emissions standards. From 01/04/2025 vehicle licences will not be renewed in respect of any licensed vehicle that does not meet or exceed Euro 6 emissions standards.	
TM4	Bus fleet / lower pollutant emissions	Promoting Low Emission Transport	Other	2019	-	SACDC, HCC & bus operators	HCC & bus operator s	No	Not Funded	£100k - £500k	To be confirme d	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	Number of link improvements	Feasibility design and consideration is continuing with support from HCC's appointed consultants. With the award of £29m of Bus Service Improvement Plan (BSIP funding) funding for the next 3 years means St Albans is one of the key towns that HCC will be focusing on in terms of bus services, infrastructure, ticketing and fares and bus priority.	The Pandemic has delayed investment by bus operators, therefore a target of reducing emissions through the introduction of buses to meet Euro VI standard has slipped. In addition to enforcing minimum fleet standards were agreed by Enhanced Partnership Scheme Variation Agreement in response to investment in bus priority facilities, the Intalink Enhanced Partnership will also adopt aspirational targets to improve the emissions standards of the fleet used across Hertfordshire. Air quality improvements will be driven by operator fleet replacement programmes.

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
TM5	Bus routes through AQMA are only electric	Promoting Low Emission Transport	Other	2024/2025	2024/2025	SACDC, HCC & bus operators	HCC & bus operator s	No	-	<£10k	To be confirme d	Reduce NOx and PM emissions	Number of bus routes through AQMA which are electric	This measure is dependent on operator acceptability. ZEBRA grant funding to promote 27 electric buses in the county has been secured It is expected they will be delivered from mid-2024 to 2026. Operators to be pushed to use the Euro 6 and better on routes that pass through the AQMA.	
TM6	Consider requiring developers to install electric charging points in new development s under S106 agreements	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2019	2023	SACDC	SACDC	No	Not Funded	-	Planning	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels both in the AQMA and the District generally.	Number of charging points installed	10 Electric Vehicle Charge Points have been installed in the new Harpenden Sports and Leisure Centre. Implementation of low emission development policies within the local plan to encourage new public transport solutions and electric charging points	To include in proposed SPD as measure where appropriate
TM7	Freight and Delivery hub - Investigate introduction of last mile, low emission delivery through use of active transport e.g., cargo bikes. An appropriate freight hub would be required	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2024/2025	2024/2025	SACDC & HCC Infrastructure/ Planning Team	To be determin ed	Potentially	-	£100k - £500k	To be confirme d	Reduce NOx and PM emissions	Number of goods vehicles & number of cargo bikes utilised	-	Consolidation centre to be identified for freight management & other potential bike depot sites throughout District. This measure will be supported by Hertfordshire County Council, should the consolidation centres identified be within their lands. HCC support consideration of this aspect in general although do not hold levers to implement unless it were HCC land which were found to be a suitable location for consolidation hub.
TM8	Deliver the top priority schemes identified within the Local Cycling and Walking Infrastructure Plan, including the provision of improved walking routes and protective infrastructure for people cycling.	Promoting Travel Alternative S	Promotion of cycling	2024/2025	-	SACDC & HCC	SACDC & HCC	No	Not Funded	-	Active	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels both in the AQMA and the District generally.	Usage figures	- HCC as Highways Authority is the lead and SADC supports through coordinating delivery of individual schemes and collective approach through Transport Impact Assessments (TIA). - 2024/25 Supported the Marlborough Road cycle lane. - Continuing to work on Victoria Road scheme.	

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TM9	Cargo bike hubs located throughout the city to decrease need for car for local trips	Promoting Travel Alternative s	Promotion of cycling	2024/2025	2024/2025	SACDC	To be determin ed	Potentially	-	£10k - 50k	To be confirme	Reduce NOx and PM emissions	Usage figures	Cargo bike in use by London Colney Parish Council and available for community use	
TM10	Consider an increase in car parking charges with the view to making bus travel a more attractive alternative	Promoting Travel Alternative S	Other	2019	-	SACDC	SACDC	No	Not Funded	-	Planning	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels both in the AQMA and the District generally.	Car park volume figures	From April 2022 and again in 2023, permit prices changed to include emissions-based charging to encourage cleaner car ownership. All other vehicle type permits and other charges relating to on street parking, were increased or amended to encourage more sustainable transport where possible.	Emission based resident permits now in place. Higher prices charged for 2nd or 3rd vehicles to deter ownership. Annual review of fees and charges introduced. Additional work being carried out in 24/25 to potential remove cash as payment type reducing the need for cash collections, reducing the need for collection vehicles.
TM11	Pilot the Station Travel Plan	Promoting Travel Alternative S	Other	2010	-	SACDC & HCC	HCC	No	Not Funded	-	Planning	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels both AQMA's and the District generally.	Usage figures	The LCWIP has been adopted by both councils and three of the top priority routes are being progressed into early design stages.	St Albans City Station: GTR have not moved forward with the proposed pilot to promote active and sustainable travel to stations. All rail companies are under considerable financial pressure so funding for this kind project is scarce. Work has been done over the past year to improve the security of cycle storage at the station to encourage more cycling to the station.
TM12	Community Rail Partnership (CRP) The Abbey Line	Promoting Travel Alternative S	Promote use of rail and inland waterways	2010	-	SACDC & HCC	SACDC & HCC	No	Not Funded	-	Planning	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels both AQMA's and the District generally.	Usage figures	SACDC and HCC need to continue to apply pressure on LNR to ensure they provide a reliable service at times not affected by industrial action. A new timetable was introduced in December 2022 and slightly altered in May 2023. The service now runs hourly off peak rather than every 45 minutes formally. This has allowed the introduction of a later service.	

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TM13	To increase bus patronage and encourage modal shift from the car to public transport	Transport Planning and Infrastructu re	Bus route improvements	2018	2023	SACDC & HCC	SACDC & HCC	No	Not Funded	<£10k	Active	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels both AQMA's and the District generally.	Service numbers	Bus Services operated on a commercial basis. Over the last year the main issue with public transport has been driver shortages. The Government backed £2 Single Fare Scheme is to remain in place until 31st December 2024.	
TM14	Car clubs for new development s	Alternative s to private vehicle use	Car & lift sharing schemes	2024/2025	2024/2025	SACDC & HCC Air Quality / Planning Team	To be determin ed	Potentially	-	<£10k	To be confirme d	Reduce NOx and PM emissions	Reduction of car journeys resulting from car club	Car club launched to the public in January of 2022, promoted in Community News, Sustainability News and leaflets. Usage is currently low. Council and Enterprise working on more local promotion including exploring car parks, bus stop posters, banner sites, and leisure centres.	Car clubs in new developments need to be encouraged by the Local Planning Authority and may also involve HCC Development Management colleagues where required
TM15	Signal optimisation	Traffic Manageme nt	UTC, Congestion management, traffic reduction	2024/2025	2024/2025	HCC	To be determin ed	No	Not Funded	£100k - £500k	To be confirme	Reduce NOx and PM emissions by reducing stop- starting of vehicles	Number of vehicles coming to a stop reduced	-	HCC suggests that the junction is already optimised for the current road layout.
TM16	20mph zones - Review the effects of 20mph zones on air quality	Promoting Low Emission Transport	Emission reduction	2024/2025	2024/2025	SACDC & HCC	To be determin ed	Potentially	Not Funded	<£10k	To be confirme d	Reduce NOx and PM emissions within specific areas where 20 mph zones are located	Number of vehicles speeding reduced	Many areas in St Albans have already been assessed and have started implementation.	
TM17	Consider closure of High Street	Promoting Low Emission Transport	Emission reduction	2024/2025	Ongoing	SACDC & HCC	SACDC & HCC	No	Not Funded	<£10k	To be confirme d	Reduce NOx and PM emissions within specific areas located within and around the AQMA	Air quality monitoring data	St Albans High Street Recovery Air Quality Report: There is no evidence that the High Street trials have had a negative impact on air quality, including on potential displacement routes along Folly Lane and Catherine Street. There is some evidence that the road closures may have improved air quality at the Peahen Junction and for the St Albans AQMA, as well as other key sites in the centre of St Albans.	

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
HEA1	Campaign to raise awareness of air quality and the impact on air quality, of idling engines (when parked)	Public Information	Via the Internet	2017	2023	SACDC	Staff costs	No	Not Funded	-	Planning	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	Media coverage	HCC have resources to promote schools taking anti-idling action. Local support from St Albans City & District Council officers in engaging schools to take up these measures would be supported. HCC have an Anti-Idling Campaign that Modeshift registered schools can participate in.	Schools that participated in the Antil Idling Campaign in 2024 : Using information boards displayed on grounds for a limited period and visual media available to put on website and in newsletters, schools act to encourage car users in the community to turn their engines off when on the school site and in the surrounding areas, to reduce car emissions and improve the air quality. Working in partnership with the Let's Clear The Air team since the Summer Term 2021, the team continue to use their banners to support our Anti Idling Campaign in schools. Killigrew Primary Sandringham
HEA2	Air Alert Scheme	Public Information	Via the Internet	2020	Ongoing	SACDC/HCC	-	No	Funded	< £10k	Complet ed	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	% of population sign-up	The air alert scheme has been reviewed, in terms of membership sign up. Approximately 20% increase in signups in the last 12 months. Since promotion started in 2022 there have been 47 new sign ups. This represents a doubling from pre intervention numbers in St Albans.	
HEA3	Engage with schools to raise awareness of air pollution	Public Information	Other	2024/2025	-	SACDC	Staff	No	Funded	< £10k	To be confirme	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	Number of schools utilising air pollution teaching toolkit	HCC have offered schools the opportunity to have air pollution monitors (as promoted in the sustainable schools newsletter	

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
HEA5	Promotion of Clean Air Day / Clean Air Night	Public Information , Promoting Travel Alternative s, Vehicle Fleet Efficiency, Traffic Manageme nt, Alternative s to private vehicle use	Via other mechanisms, Intensive active travel campaign & infrastructure, Promotion of cycling, Promotion of walking, School Travel Plans, Driver training and ECO driving aids, Fleet efficiency and recognition schemes, Antiidling enforcement, Car & lift sharing schemes	Ongoing	Ongoing	SACDC	Staff costs	No	Funded	-	Active	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the District generally.	Uptake in community action and air quality awareness. Possibility of using surveys to measure awareness and knowledge base	Clean air campaign to cover a wide variety of themes	
HEA8	Support households by providing information and access to funding for the installation of energy efficiency, heat decarbonisati on and renewable energy sources	Public Information	Via the internet or physical advertisements	2024/2025	-	SACDC	Staff	No	Funded	<£10k	To be confirme d	It is not possible to specifically quantify the impact of small-scale projects that the Council are working on with partners. However individual & cumulative AQ measures which reduce emissions are beneficial to improving pollutant levels in the AQMA and the	Reduction in emissions from poor energy efficiency standards and high-impact heating	- Warm Homes: Local Grant: Awarded £1.5M in 2025 for 3 year project to deliver home energy efficiency to fuel poor homes. Scheme is in development. - Herts Home Retrofitting guide produced and promoted via media channels. - Planning consulted Resident Associations to facilitate development of guidance for solar PV within the conservation area. Most applications will be dealt with on a case by case basis but project helped to support and encourage those keen to install solar PV. Guidance is easily accessible on SADC website. - Superhomes Project (now closed): NEF delivered Home Energy Retrofit Option plans to 71 local households. 13 went on to install retrofit measures. - 134 residents given advice through St Albans Home Energy Support Service in 2024 and 7 in 2025. - 432 Solar PV, 386 batteries and 19 EV chargers installed locally via Solar Together 2022 & 2023, bulk buying solar pv scheme. Across the county, Solar Together Herts 2022 & 2023 delivered 1,665 installations, resulting in 6.2 MW installed capacity and over £17M in private investment in renewables. iChoose are now trialling an ASHP programme. - Solar Together 2025 is currently in progress with wide promotion across the District	This highlights the efforts of local housing teams in providing retrofit. There is future potential to link this to work around healthier, more sustainable homes. There is a concerted effort at HCC to promote a model in this space with focus on both Carbon and wider benefits

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

As detailed in Policy Guidance LAQM.PG22⁵ (Chapter 8) and the Air Quality Strategy⁶, 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} has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

St Albans City & District Council does not currently undertake any monitoring of PM₁₀ or PM_{2.5}.

Defra maintains national background maps, which are provided for each 1km × 1km grid square across the UK. The most recent release of these maps is based on 2021 concentrations, and provides projections forward to 2040. These maps also include source apportionment information to allow key sources to be identified.

Figure 2-1 presents the maximum background concentrations of PM_{2.5} in St Albans City & District Council in the latest version of the Defra background mapping data⁷ (2021-based, published in 2024). The highest concentration for 2024 is predicted to be 8.2 μ g/m³ within the 1km x 1km grid square with the centroid grid reference of X = 514500, Y = 207500. This is an area located near St Albans centre and the closest main road is Verulam Road (A5183).

These maps show that all background concentrations of $PM_{2.5}$ are far below the 2040 target for $PM_{2.5}$ of 10 $\mu g/m^3$. Concentrations are predicted to reduce slightly between 2025 and 2040 in line with regional and local reductions in emissions.

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⁵ LAQM-Policy-Guidance-2022.pdf

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

⁷ Background Mapping data for local authorities - 2021 - DEFRA UK Air - GOV.UK

Figure 2-1 Maximum background annual mean $PM_{2.5}$ concentration in St Albans, $\mu g/m^3$, 2021 to 2040

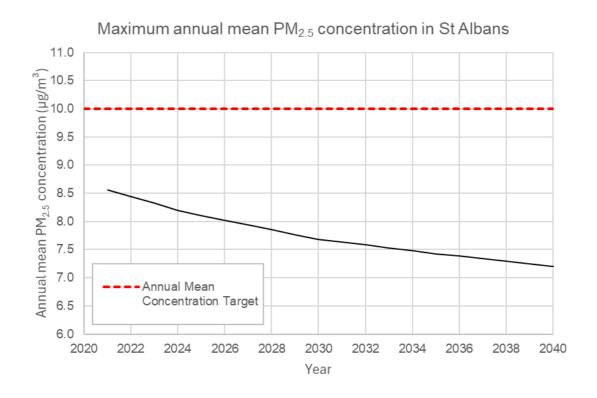
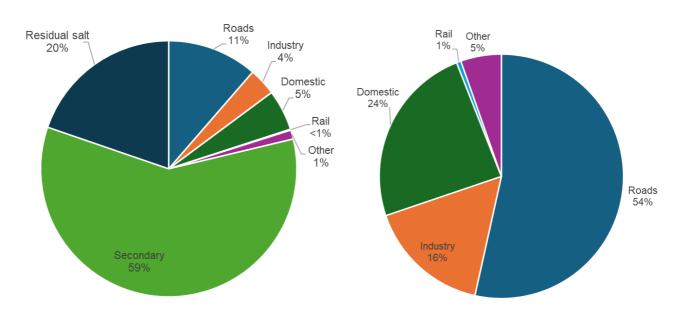


Figure 2-2 shows source apportionment of PM_{2.5} concentrations in St Albans centre in 2025. The chart on the left of the figure includes secondary (natural and transboundary) sources; the chart on the right shows only primary (man-made) sources.

Figure 2-2 Source apportionment for PM_{2.5} concentrations in St Albans centre, 2025



The primary man-made source of local air pollution within St Albans is vehicular emissions.

St Albans City & District Council are working to reduce emissions of air pollutants across the District, and many of the measures used to reduce emissions of NO₂ and PM₁₀ also impact emissions of PM_{2.5}, as emissions originate from the same sources.

The AQAP measures within Table 2-2 aim to reduce emissions of road vehicle percentages and promote travel alternatives, and will therefore also contribute to reducing particulate emissions. St Albans City & District Council is taking 17 measures forward to address pollutants originating from vehicle emissions, which will therefore also reduce PM_{2.5} emissions. See actions with the prefix "TM" in Table 2-2 for details.

The Department of Health's Public Health Outcomes Framework has a number of public health indicators that are used to focus public health action, identify areas of health inequality and concern, and monitor the differences in health impacts across regions in the UK. This framework includes an indicator "D01- Fraction of Mortality Attributable to Particulate Air Pollution" which is calculated using background annual average PM_{2.5} concentrations, modelled at a 1km² resolution based on measured concentrations from the Automatic Urban and Rural Network (AURN). St Albans has a 7.4% fraction of mortality calculated for 2023, which is above both the average for England overall (7.0%), and the East of England Region (7.2%) which makes it even more important that PM_{2.5} emissions are reduced. The 2023 data is used as the 2024 dataset has not been made available at the time of writing.

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

This section sets out the monitoring undertaken within 2024 by St Albans City & District 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

There was no automatic monitoring undertaken by St Albans City & District Council in 2024.

3.1.2 Non-Automatic Monitoring Sites

St Albans City & District Council undertook non-automatic (i.e. passive) monitoring of NO₂ at 51 sites during 2024. Table A.1 in Appendix A presents the details of the non-automatic sites.

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

3.2 Individual Pollutants

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

3.2.1 Nitrogen Dioxide (NO₂)

Table A.2 in Appendix A compares the bias adjusted monitored NO_2 annual mean concentrations for the past five years with the air quality objective of 40 μ g/m³. Note that the concentration data presented represents the concentration at the location of the

monitoring site, following the application of bias adjustment and annualisation as required (i.e., the values are exclusive of any consideration to fall-off with distance adjustment).

For diffusion tubes, the full 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.

Details of annualisation and bias adjustment are found in Appendix C. The 2024 diffusion tube results indicate that there were no exceedances of the annual mean objective at any monitoring locations. The highest annual mean concentration measured within the AQMA during 2024 was 34.8 μ g/m³ at SA160 Hollywell Hill. The highest annual mean concentration measured outside the AQMA during 2024 was 32.6 μ g/m³ at SA13 St Peters Street.

3.2.2 Particulate Matter (PM₁₀)

There was no PM₁₀ monitoring undertaken in St Albans City & District Council during 2024.

3.2.3 Particulate Matter (PM_{2.5})

There was no PM_{2.5} monitoring undertaken in St Albans City & District Council during 2024.

3.2.4 Sulphur Dioxide (SO₂)

There was no SO₂ monitoring undertaken in St Albans City & District Council during 2024.

4 Planning Applications

The relevant planning guidance controls how St Albans City & District Council will manage potential air quality impacts from proposed developments. Between 01/01/2024 and 25/04/2025 there were 32 major planning applications received in relation to air quality matters. There are listed in Table 4-1 below.

Table 4-1 - Major Applications Received Between 01/01/2024 and 25/04/2025

Ref No	Received	Decision	Location	Proposal	EIA/AQ Report submitted?
5/2024/0066	15/01/2024	12/04/2024	Southdown Industrial Estate Southdown Road Harpenden Hertfordshire	Variation of Condition 9 (groundwater contamination) of planning permission 5/2021/2376 dated 08/06/2022 for Demolition of existing buildings and the construction of eight new units totalling 5947 sqm for use within Class E (formerly Class B1), B2 and B8 of the Use Classes Order; builders merchant, trade counter (Sui Generis); together with car and HGV parking, landscaping and hard surfacing and associated engineering works and facilities and services (resubmission following withdrawal of 5/2020/1928)	No
5/2024/0086	17/01/2024	14/11/2024	Bricket Wood Sports And Country Club, Paintball Site & Bricket Lodge Lye Lane Bricket Wood Hertfordshire	Outline application (access sought) - Demolition of existing buildings and dwellings and construction of 34 low energy dwellings of which 50% will be reserved for over 55's and associated access and highway alterations	No
5/2024/0142	24/01/2024	21/01/2025	Land To Rear Of Burston Garden Centre North Orbital Road Chiswell Green St Albans Hertfordshire	Variation of condition 2 (approved plans) to allow adjustments to the layout and roof profile of the central Assisted Living building and changes to the fenestration and detailing of both the Assisted Living building as well as some of the care bungalows and alterations to the site access of planning permission 5/2023/0811 dated 28/07/2023 for Variation of Condition 2 (approved plans) to allow alterations to the roof profile of the central part of the Assisted Living building, and alterations to the layout, fenestration and detailing of the Assisted Living building and some of the care bungalows for 5/2020/3022 allowed on appeal dated 31/01/2022 for Demolition of all existing buildings, structures and hardstanding and redevelopment of the site to provide a new retirement community comprising 80 assisted living apartments with community facilities and 44 bungalows together with	No

Ref No	Received	Decision	Location	Proposal	EIA/AQ Report submitted?
				associated access, bridleway extension, landscaping, amenity space, car parking and associated and ancillary works	
5/2024/0245	09/02/2024	Pending	Redbourn Recreation Centre Dunstable Road Redbourn Hertfordshire	First floor extension and creation of roof terrace, construction of new linked sports hall building, new 3G football pitch with fencing and floodlighting, new cricket nets, relocation of turf football and cricket pitches and artificial cricket pitch, new cycle and car parking and landscaping works	No
5/2024/0309	19/02/2024	27/02/2025	Victoria, Alexandra, Littleport and Collingham House Marlborough Park Southdown Road Harpenden Hertfordshire	Application for Approval of Reserved Matters (appearance and landscape sought) of outline planning permission 5/2020/2762 dated 23/02/2021 for mixed use 3-storey commercial office and residential development to provide Offices and 8 dwellings	No
5/2024/0393	04/03/2024	31/05/2024	67 St Peters Street St Albans Hertfordshire	Variation of Conditions 1 (time limit - full), 2 (approved plans), 3 (approved plans) and 12 (written scheme of archaeological work) to allow alteration to the residential mix of units to 14x one-bedroom and 6x two bedroom units, and amendments to the internal layout, window design, central courtyard, refuse store and building services of planning permission 5/2020/2978 dated 16/12/2021 for Change of use of first floor and part of ground floor from Class E(a)(retail) to Class C3(residential) and construction of two additional storeys to create 20 dwellings comprising of 4 studio flats, 9 one bedroom and 7 two bedroom, retention of existing ground floor retail unit (Class E(a)) and change of use of basement to flexible retail/leisure use (Class E(a)/Class E(d)) and alterations to openings (resubmission following refusal of 5/2020/0278)	No
5/2024/0408	06/03/2024	10/10/2024	Units 6 & 7 Batford Mill Lower Luton Road Harpenden Hertfordshire	Demolition of existing industrial unit and provision of 140sqm of class A1 retail and class D2 assembly and leisure space and new dwellings compromising a mix of one, two and three- bedroom flats and six dwelling houses, new cycle storage and transformer housing, associate parking and landscaping	No
5/2024/0767	02/05/2024	17/12/2024	Land Fronting And To South West Of St Albans Cathedral Romeland St Albans Hertfordshire	Erection of temporary structures in association with graduation ceremonies	No
5/2024/0831	13/05/2024	14/08/2024	Oakwood Primary School Oakwood Drive St Albans Hertfordshire	Removal of Condition 4 (surface water drainage scheme) of planning permission 5/2023/1402 dated 02/02/2024 for The provision of a Multi-Use Games Area, provided with a plain green sports grass and enclosed with a 2m high metal perimeter rebound powder coated finish fencing, including 2 No. Access gates and recessed goal areas	No

Ref No	Received	Decision	Location	Proposal	EIA/AQ Report submitted?
5/2024/0927	29/05/2024	Pending	Land Between Three Cherry Trees Lane And Cherry Tree Lane Hemel Hempstead Hertfordshire	Application for approval of reserved matters (appearance, landscaping, layout, scale) of outline planning permission 5/2016/2845 dated 30/04/2019 for Up to 600 dwellings (C3), land for primary school (D1), land for local centre uses (A1, A3, A4, A5, D1, D2), land for up to 7,500 square metres of employment uses (B1, B2, B8), landscaping, open space and play areas, associated infrastructure, drainage and ancillary works, new roundabout access off Three Cherry Trees Lane, new priority junction off Three Cherry Trees Lane, new vehicular access to Spencer's Park Phase 1 and an emergency access to the employment land off Cherry Tree Lane. (Cross boundary application falling within Dacorum Borough Council and St Albans City & District Council administrative areas)	No
5/2024/1007	11/06/2024	Pending	18 to 28 Catherine Street & 8 to 12 Church Street St Albans Hertfordshire	Redevelopment of site to provide retirement living community, including a part 2.5 storey, part 3 storey apartment building comprising forty two apartment units, communal uses, landscape gardens, servicing and parking, and six chalet bungalow retirement living units	Yes
5/2024/1284	23/07/2024	Pending	Land to Rear of 112-156b Harpenden Road St Albans Hertfordshire	Approval of Reserved Matters (appearance, landscaping, layout, scale) of outline planning permission 5/2021/0423 dated 12/01/2022 for Residential development of up to 150 dwellings together with all associated works	No
5/2024/1326	30/07/2024	27/11/2024	St Albans City Hospital Waverley Road St Albans Hertfordshire	Variation of Conditions 1 (reserved matters), 4 (approved parameter plans), 12 (highway details), 18 (archaeological WSI), 22 (SUDS details), 25 (land contamination investigation) and 26 (land contamination and remediation strategy) of planning permission 5/2023/1685 dated 02/02/2024 for Variation of Condition 4 (reserved matters parameters) of planning permission 5/2022/1518 dated 02/08/2023 for Outline application (all matters reserved) - Part demolition of hospital buildings, construction of two new buildings, two infill extensions and new electrical switch room. External works associated with refurbishment of existing buildings. Associated parking, access and landscape works	No
5/2024/1447	22/08/2024	11/12/2024	St Albans City Hospital Waverley Road St Albans Hertfordshire	Submission of Reserved Matters (details of access, appearance, landscaping, layout and scale) relating to the Community Diagnostics Centre Phase 1 development for a proposed extension to the existing Runcie Wing with access stairs and fenced enclosure at roof level of planning permission 5/2024/1326 dated 27/11/24 for Variation of Conditions 1 (reserved matters), 4 (approved parameter plans), 12	No

Ref No	Received	Decision	Location	Proposal	EIA/AQ Report submitted?
				(highway details), 18 (archaeological WSI), 22 (SUDS details), 25 (land contamination investigation) and 26 (land contamination and remediation strategy) of planning permission 5/2023/1685 dated 02/02/2024 for Variation of Condition 4 (reserved matters parameters) of planning permission 5/2022/1518 dated 02/08/2023 for Outline application (all matters reserved) - Part demolition of hospital buildings, construction of two new buildings, two infill extensions and new electrical switch room. External works associated with refurbishment of existing buildings. Associated parking, access and landscape works.	
5/2024/1508	02/09/2024	Pending	Land to South of Codicote Road and Cory-Wright Way Wheathampstead Hertfordshire	Development of site to provide retirement living accommodation (Use Class C3 Category II), comprising of apartment block of 33 units and 13 dwellings (8 bungalows and 5 chalet bungalows) with associated access alterations, communal gardens and landscaping	Yes
5/2024/1710	04/10/2024	Pending	St Lukes School Crouch Hall Lane Redbourn Hertfordshire	Demolition of existing gym building and store and shed structures and construction of a training café building for young people with Special Education Needs and Disabilities (Class E), alterations to existing school farm together with ancillary storage containers and animal shelters, new landscaped courtyard, further landscape and habitat enhancements, cycle and car parking and refuse provision	No
5/2024/1752	11/10/2024	Pending	Land Rear Of Round House Farm Roestock Lane Colney Heath St Albans Hertfordshire	Outline application (access sought) - Construction of up to 93 dwellings, a community building and new vehicular access	Yes
5/2024/1879	31/10/2024	Pending	67 St Peters Street St Albans Hertfordshire	Variation of Conditions 1 (development start), 2 (approved plans), 3 (design & access statement and daylight & sunlight assessment), 12 (written scheme of archaeological works) and 32 (obscure glazing) of planning permission 5/2020/2978 dated 16/12/2021 Change of use of first floor and part of ground floor from Class E(a)(retail) to Class C3 (residential) and construction of two additional storeys to create 20 dwellings comprising of 4 studio flats, 9 one bedroom and 7 two bedroom, retention of existing ground floor retail unit (Class E(a)) and change of use of basement to flexible retail/leisure use (Class E(a)/Class E(d)) and alterations to openings (resubmission following refusal of 5/2020/0278)	No
5/2024/1885	31/10/2024	27/03/2025	Moor Mill Tanker Depot Smug Oak Lane Bricket Wood Hertfordshire	Outline application (access sought) - Construction of up to 16 residential dwellings including landscaping and associated infrastructure	No

Ref No	Received	Decision	Location	Proposal	EIA/AQ Report submitted?
5/2024/1887	31/10/2024	21/01/2025	Land Off Orchard Drive Park Street St Albans Hertfordshire	Variation of Condition 1 (approved plans) to accommodate a change in orientation of plots 13-16 of planning permission 5/2023/2443 dated 25/04/2024 for Submission of Reserved Matters (appearance, landscaping, layout, scale) for outline permission 5/2021/2730 dated 21/06/2022 for Construction of up to 30 dwellings with garages and associated parking, landscaping and access works (resubmission following refusal of 5/2022/2747)	No
5/2024/1915	05/11/2024	Pending	Land South West of and including 39 Chiswell Green Lane St Albans Hertfordshire	Submission of Reserved Matters (details of appearance, landscaping, layout and scale) in respect of the erection of 191 dwellings and associated car parking and infrastructure following outline planning permission 5/2022/0927 dated 22/03/2024, allowed on appeal, for Outline application (access sought) - Demolition of existing structures and construction of up to 391 dwellings (Use Class C3), provision of land for a new 2FE primary school, open space provision and associated landscaping. Internal roads, parking, footpaths, cycleways, drainage, utilities and service infrastructure and new access arrangements	No
5/2024/1980	14/11/2024	11/03/2025	The Hedges Woollam Crescent St Albans Hertfordshire	Variation of Conditions 2 (approved plans) and 17 (acoustic design statement) to include revised drawings of the development as the proposed Air Source Heat Pumps were not included in the original planning application and permitted development rights did not exist prior to development of planning permission 5/2020/2451 dated 21/09/2021 for Twelve new dwellings comprising six, three bedroom semi-detached houses and six, two bedroom flats, cycle and bin stores and associated landscaping, parking and new crossovers following demolition of existing temporary accommodation units (resubmission following withdrawal of 5/2020/1242)	No
5/2024/2007	18/11/2024	Pending	Land Between The White Barn And 42 Tollgate Road Colney Heath St Albans Hertfordshire	Erection of 30 dwellings, creation of a new vehicular access, two new public open spaces, a local area of play, a locally equipped area of play, a temporary structure community building for nature watching, associated landscaping, internal roads, parking and footpaths	No
5/2024/2070	26/11/2024	Pending	7 Handley Page Way Old Parkbury Lane Colney Street St Albans Hertfordshire	Flexible Class E Commercial, Business & Service use or Class B8 Storage or Distribution use with proposed extension of factory/warehouse element at southern elevation of Unit 7 with alterations to service yard, parking layout, construction of a bike shelter, new vehicular access and associated works	No
5/2024/2084	28/11/2024	Pending	Hanstead Park Smug Oak Lane Bricket Wood Hertfordshire	Variation of Conditions 1 (Reserved Matters details) and 29 (Ecological Management Plan) of planning permission 5/2020/2041	No

Ref No	Received	Decision	Location	Proposal	EIA/AQ Report submitted?
				dated 10/08/2022 for Variation of Condition 21 (completion of road works) of planning permission 5/2014/3250 allowed on appeal dated 30/06/2016 for Outline planning application for the redevelopment of the site to provide up to 129 new building dwellings and garaging (Class C3) with access via Smug Oak Lane following demolition of existing buildings. Refurbishment and extension (including new roof structure) of the Old Lodge to provide a single dwelling and refurbishment and extension of Hanstead House to provide 8 dwellings and garaging (Class C3) with access via Smug Oak Lane (total number of dwellings 138) All matters reserved except for access (resubmission following refusal of 5/2013/2119)	
5/2024/2184	12/12/2024	16/04/2025	Civic Centre Opportunity Site (South) Victoria Street St Albans Hertfordshire	Variation of Conditions 32 (noise assessment), 36 (opening hours - Use Classes A1, A2, A3, A4, B1(a) and D1) and 39 (commercial floorspace use classes) of planning permission 5/2022/1405 dated 28/03/2023 for A mixed-use scheme comprising 93 units of Class C3 accommodation, approximately 6,200m² of flexible commercial floorspace and associated plant, landscaping including public realm, car and cycle parking and access works	No
5/2024/2239	18/12/2024	Pending	Land Rear Of Forge End Chiswell Green St Albans Hertfordshire	Submission of Reserved Matters (details of appearance, landscaping, layout and scale) in respect of the erection of 150 dwellings and associated open space, hard and soft landscaping, car parking and other infrastructure following outline planning permission 5/2022/0927 dated 22/03/2024, allowed on appeal, for Outline application (access sought) - Demolition of existing structures and construction of up to 391 dwellings (Use Class C3), provision of land for a new 2FE primary school, open space provision and associated landscaping. Internal roads, parking, footpaths, cycleways, drainage, utilities and service infrastructure and new access arrangements	No
5/2024/2271	20/12/2024	Pending	Land Off Sandridgebury Lane And Between The Railway And Harpenden Road St Albans Hertfordshire	Hybrid planning application comprising: (1) Full planning application for the relocation and replacement of existing playing fields and erection of pavilion annex; and (2) Outline planning application (access sought) for the construction of up to 1000 new homes (Use Class C3) to include a mix of market housing, affordable housing, age restricted specialist accommodation for the elderly, adult disability service units; a care home (Use Class C2); a local centre (Use Classes E and F); a primary school (Use Class F); the laying out of green infrastructure including habitat creation; drainage infrastructure;	Yes

Ref No	Received	Decision	Location	Proposal	EIA/AQ Report submitted?
				earthworks; pedestrian and cycle routes; new means of access and alterations to existing accesses	
5/2024/2272	20/12/2024	Pending	Harpenden Golf Club Redbourn Lane Hatching Green Harpenden Hertfordshire	Remodelling of golf course with the creation of a new practice area	No
5/2024/2293	24/12/2024	Pending	Land Rear of Noke Side & Long Fallow and 4 Noke Side Chiswell Green St Albans Hertfordshire	Outline application (access sought) - Residential development of up to 27 dwellings and associated works including demolition of 4 Noke Side	No
5/2025/0111	22/01/2025	Pending	"Land Bounded By The Rivers Colne And Ver And Radlett Road Frogmore St Albans Hertfordshire "	Outline application (all matters reserved) - A mixed-used development comprising approximately 183 new dwellings (Class C3), up to 579sqm of workspace (Class E(c), E(g)), up to 410sqm of community space (Class F2(a), F2(b), F2(b) and up to 265sqm café (Class E(b)), along with approximately 14ha of open space, associated access and routes, hard and soft landscaping and car and cycle parking	No

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)	Tube Co- located with a Continuous Analyser?	Tube Height (m)
SA101	Museum Hatfield Road St Albans SA001	Roadside	515105	207476	NO ₂	N	9.3	1.6	No	2.7
SA107	Redbourn JMI Long Cutt Redbourn SA011	Background	510138	212525	NO ₂	N	11.3	2.2	No	2.6
SA109	High Street Harpenden SA009	Kerbside	513427	214308	NO ₂	N	6.3	0.1	No	2.6
SA110	Crabtree JMI Crabtree Lane Harpenden SA0	Kerbside	514438	214353	NO ₂	N	7.5	1.5	No	2.6
SA112	High Street Wheathampstead SA013	Kerbside	517727	214041	NO ₂	N	16.3	1.7	No	2.6
SA114	Fleetville 1 Royal Road St Albans SA020	Background	516549	207391	NO ₂	N	51.3	12.5	No	2.5
SA117	Five Acres London Colney Roundabout SA01	Kerbside	517712	204782	NO ₂	N	11.9	1.4	No	2.4
SA120	Sleapcross Gardens Smallford SA037	Kerbside	520053	206618	NO ₂	N	15.6	1.7	No	2.3
SA121	Mount Drive Park Street SA033 Kerbside		514654	204546	NO ₂	N	37.5	1.4	No	2.5
SA123	Radlett Road Park Street SA031	Kerbside	515311	202730	NO ₂	N	4.4	0.3	No	2.4

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m)	Tube Co- located with a Continuous Analyser?	Tube Height (m)
SA124	Smug Oak Lane Bricket Wood SA030	Kerbside	515383	202528	NO ₂	N	4.5	1.3	No	2.5
SA125	Lye Lane Bricket Wood SA021	Kerbside	513308	202655	NO ₂	N	15.6	0.4	No	2.4
SA127	Oakwood Road Bricket Wood SA026	Kerbside	512570	202716	NO ₂	N	4.4	1.4	No	2.4
SA128	Waterdale Old Watford Rd Bricket Wd A405	Roadside	512004	202105	NO ₂	N	1.0	25.0	No	2.4
SA133	Belmont Hill St Albans SA042	Kerbside	514606	206801	NO ₂	N	13.8	2.5	No	2.4
SA134	Albert Street St Albans SA043	Kerbside	514648	206919	NO ₂	N	5.0	2.2	No	2.6
SA135	Watsons Walk St Albans SA040	Kerbside	515060	206866	NO ₂	N	3.8	1.2	No	2.5
SA136	St Peters Street St Albans SA003	Kerbside	514883	207422	NO ₂	N	34.3	1.1	No	2.3
SA137	High Street St Albans SA039	Kerbside	514684	207105	NO ₂	N	4.3	1.6	No	2.5
SA138	Peahen PH Holywell Hill St Albans SA015	Kerbside	514701	207082	NO ₂	Y - AQMA No. 1	15.6	2.6	No	2.6
SA140	Lattimore Road North St Albans	Kerbside	515185	207070	NO ₂	N	6.3	2.5	No	2.5
SA141	Town Hall St Albans Background		514722	207226	NO ₂	N	1.9	1.5	No	2.6
SA142	Beech Tree Cottage St Albans	Roadside	510754	206091	NO ₂	N	20.2	0.0	No	2.3

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)	Tube Co- located with a Continuous Analyser?	Tube Height (m)
SA143	London Road West St Albans	Kerbside	514752	207094	NO ₂	Y - AQMA No. 1	0.6	2.8	No	2.6
SA144	Forester House 1 St Peters Street St Albans	Kerbside	514833	207347	NO ₂	N	9.3	1.2	No	2.6
SA145	Moor Mill Lane Colney Street	Roadside	515257	202638	NO ₂	N	12.5	1.6	No	2.3
SA146	Forrester House 2 St Peters Street St Albans	Background	514856	207353	NO ₂	N	5.6	21.9	No	2.6
SA147	Shops St Peters Street St Albans	Background	514818	207357	NO ₂	N	47.5	15.6	No	2.5
SA148	Chequer Street St Albans	Kerbside	514705	207119	NO ₂	N	3.1	0.7	No	2.4
SA149	London Road East St Albans	Roadside	515067	206946	NO ₂	N	5.6	2.5	No	2.6
SA150	Hatfield/Royal Road St Albans	Kerbside	516590	207276	NO ₂	N	7.5	1.8	No	2.3
SA151	Thamesdale London Colney	Roadside	518782	203507	NO ₂	N	4.4	1.5	No	2.3
SA152	Shenley Lane/Kings Road London Colney	Roadside	517091	204114	NO ₂	N	6.9	2.4	No	2.4
SA153	Watling Street Park Street	Kerbside	515275	202794	NO ₂	N	12.0	1.4	No	2.4
SA154	Mount Pleasant Lane Bricket Wood	Roadside	512776	202050	NO ₂	N	21.9	2.0	No	2.5
SA155	Westminster Court St Albans	Kerbside	514346	206329	NO ₂	N	27.5	1.8	No	2.4

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m)	Tube Co- located with a Continuous Analyser?	Tube Height (m)
SA156	Folly Lane East St Albans	Roadside	514602	207674	NO ₂	N	2.5	1.6	No	2.4
SA157	Catherine Street St Albans	Kerbside	514840	207613	NO ₂	N	1.3	0.5	No	2.4
SA158	High Street Redbourn	Roadside	510818	212167	NO ₂	N	2.5	1.7	No	2.6
SA159	Marford Road Wheathampstead	Roadside	517727	213901	NO ₂	N	2.5	2.0	No	2.6
SA160	Hollywell Hill St Albans	Roadside	514682	207060	NO ₂	Y - AQMA No. 1	2.5	2.5	No	2.4
SA161	London Road Centre St Albans	Kerbside	514787	207069	NO ₂	Y - AQMA No. 1	1.9	0.5	No	2.5
SA162	Verulam Road St Albans	Roadside	514596	207338	NO ₂	N	0.3	1.8	No	2.4
SA163	Holywell Hill (Albert Street) St Albans	Roadside	514646	206942	NO ₂	Y - AQMA No. 1	2.4	1.1	No	2.4
SA164	Marlborough Road St Albans	Roadside	515024	207071	NO ₂	N	2.3	2.1	No	2.8
SA165	London Road (Black Cut) St Albans	Roadside	515316	206719	NO ₂	N	33.2	2.1	No	2.2
SA166	Lattimore Road South St Albans	Roadside	515144	206984	NO ₂	Y - AQMA No. 1	4.8	2.2	No	2.3
SA167	Clarence Road St Albans	Roadside	515990	207769	NO ₂	N	8.3	0.7	No	2.3

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)	Tube Co- located with a Continuous Analyser?	Tube Height (m)
SA168	Hatfield Road (Co-op Funeral Services) St Albans	Roadside	516144	207318	NO ₂	N	16.6	0.5	No	2.3
SA169	Beaumont Avenue St Albans	Roadside	516887	207702	NO ₂	N	5.8	1.7	No	2.3

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 NO₂ Monitoring Results: Non-Automatic Monitoring (μg/m³)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
SA101	515105	207476	Roadside	100.0	100.0	19.3	21.3	21.1	19.9	18.4
SA107	510138	212525	Background	90.6	90.6	14.7	14.6	15.8	13.5	12.4
SA109	513427	214308	Kerbside	100.0	100.0	15.9	18.0	19.3	17.9	15.1
SA110	514438	214353	Kerbside	100.0	100.0	12.3	12.9	13.0	11.5	10.3
SA112	517727	214041	Kerbside	100.0	100.0	19.6	20.6	19.7	17.9	16.5
SA114	516549	207391	Background	92.5	92.5	20.7	23.1	22.5	19.1	15.9
SA117	517712	204782	Kerbside	100.0	100.0	17.0	17.6	17.2	16.8	13.6
SA120	520053	206618	Kerbside	100.0	100.0	20.2	20.7	20.3	18.5	17.0
SA121	514654	204546	Kerbside	90.6	90.6	24.2	24.2	23.1	21.3	18.6
SA123	515311	202730	Kerbside	100.0	100.0	22.7	23.2	22.5	21.4	17.9
SA124	515383	202528	Kerbside	100.0	100.0	22.6	23.6	22.1	20.7	18.7
SA125	513308	202655	Kerbside	100.0	100.0	18.0	19.2	19.3	16.3	14.5
SA127	512570	202716	Kerbside	92.5	92.5	17.9	18.5	18.7	16.2	14.1
SA128	512004	202105	Roadside	90.6	90.6	23.8	24.0	23.8	20.6	18.8
SA133	514606	206801	Kerbside	100.0	100.0	21.5	25.2	25.1	22.4	20.2
SA134	514648	206919	Kerbside	90.6	90.6	20.9	23.0	23.9	21.3	20.1
SA135	515060	206866	Kerbside	100.0	100.0	20.1	23.0	22.5	21.0	19.0

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
SA136	514883	207422	Kerbside	100.0	100.0	25.3	38.6	34.2	32.4	32.6
SA137	514684	207105	Kerbside	100.0	100.0	25.7	24.8	31.4	27.1	26.0
SA138	514701	207082	Kerbside	67.9	67.9	27.5	29.5	31.6	28.1	24.4
SA140	515185	207070	Kerbside	92.5	92.5	17.3	18.3	18.1	16.4	15.1
SA141	514722	207226	Background	81.1	81.1	15.2	16.1	17.0	14.5	14.4
SA142	510754	206091	Roadside	100.0	100.0	19.6	20.6	20.8	18.8	15.0
SA143	514752	207094	Kerbside	100.0	100.0	25.6	26.2	28.2	24.4	23.9
SA144	514833	207347	Kerbside	92.5	92.5	28.7	30.4	29.0	28.5	31.2
SA145	515257	202638	Roadside	100.0	100.0	22.3	21.2	21.8	19.8	18.4
SA146	514856	207353	Background	56.6	56.6	19.0	21.6	21.7	20.1	19.5
SA147	514818	207357	Background	100.0	100.0	24.4	25.7	24.5	23.7	24.3
SA148	514705	207119	Kerbside	100.0	100.0	35.8	38.4	35.6	34.4	32.2
SA149	515067	206946	Roadside	100.0	100.0	20.2	21.6	23.5	19.9	18.0
SA150	516590	207276	Kerbside	100.0	100.0	21.9	20.5	20.7	20.1	19.7
SA151	518782	203507	Roadside	100.0	100.0	24.5	27.0	21.9	24.1	21.2
SA152	517091	204114	Roadside	100.0	100.0	20.1	19.7	20.4	18.4	16.2
SA153	515275	202794	Kerbside	100.0	100.0	18.0	18.5	18.7	17.6	14.6
SA154	512776	202050	Roadside	90.6	90.6	18.7	18.9	16.0	17.2	14.3

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
SA155	514346	206329	Kerbside	92.5	92.5	20.2	21.4	21.7	20.4	19.4
SA156	514602	207674	Roadside	92.5	92.5	24.9	26.9	26.4	23.4	20.6
SA157	514840	207613	Kerbside	100.0	100.0	29.1	32.1	29.1	27.9	25.3
SA158	510818	212167	Roadside	100.0	100.0	15.8	15.6	17.8	15.0	13.3
SA159	517727	213901	Roadside	100.0	100.0	19.4	21.1	20.2	18.8	16.5
SA160	514682	207060	Roadside	100.0	100.0	36.7	39.2	39.4	36.3	34.8
SA161	514787	207069	Kerbside	100.0	100.0	23.9	23.1	27.9	23.2	21.9
SA162	514596	207338	Roadside	75.0	75.0	-	-	22.3	18.8	18.2
SA163	514646	206942	Roadside	100.0	100.0	-	-	36.1	32.8	32.1
SA164	515024	207071	Roadside	100.0	100.0	-	-	22.5	17.5	16.3
SA165	515316	206719	Roadside	92.5	92.5	-	-	25.1	23.3	20.3
SA166	515144	206984	Roadside	100.0	100.0	-	-	20.9	16.9	15.3
SA167	515990	207769	Roadside	100.0	100.0	-	-	20.4	18.2	16.7
SA168	516144	207318	Roadside	100.0	100.0	-	-	21.4	20.5	17.5
SA169	516887	207702	Roadside	92.5	92.5	-	-	13.1	12.4	13.5

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

[☑] Diffusion tube data has been bias adjusted.

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

Notes:

The annual mean concentrations are presented as µg/m³.

Exceedances of the NO_2 annual mean objective of 40 $\mu g/m^3$ are shown in **bold**.

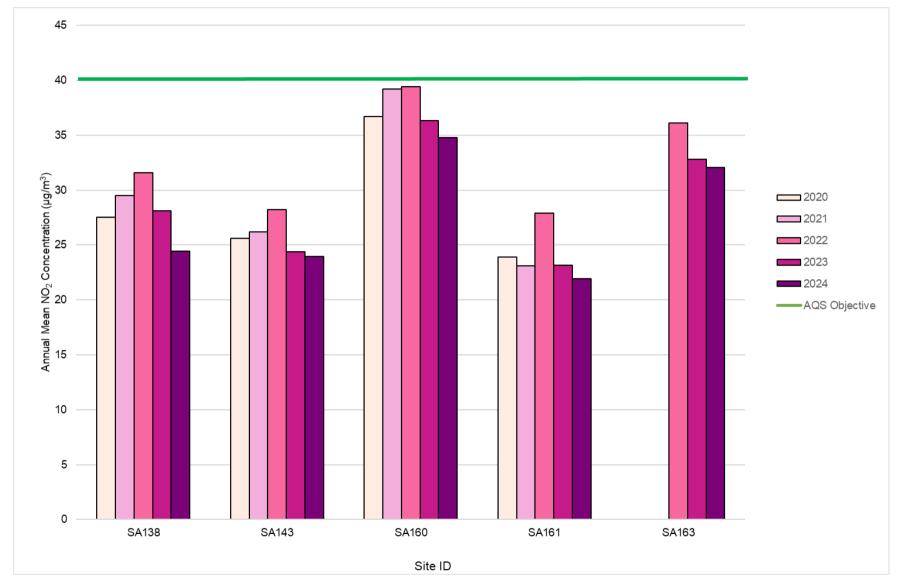
 NO_2 annual means exceeding 60 μ g/m³, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

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%).





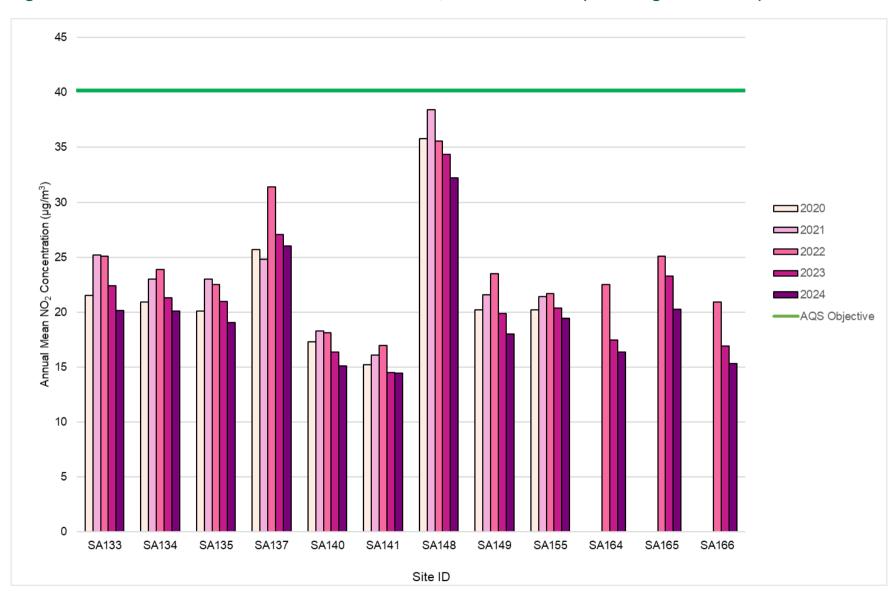


Figure A.2 – Trends in Annual Mean NO₂ Concentrations, St Albans Centre (excluding AQMA No. 1)

Figure A.3 – Trends in Annual Mean NO₂ Concentrations, Potters Crouch

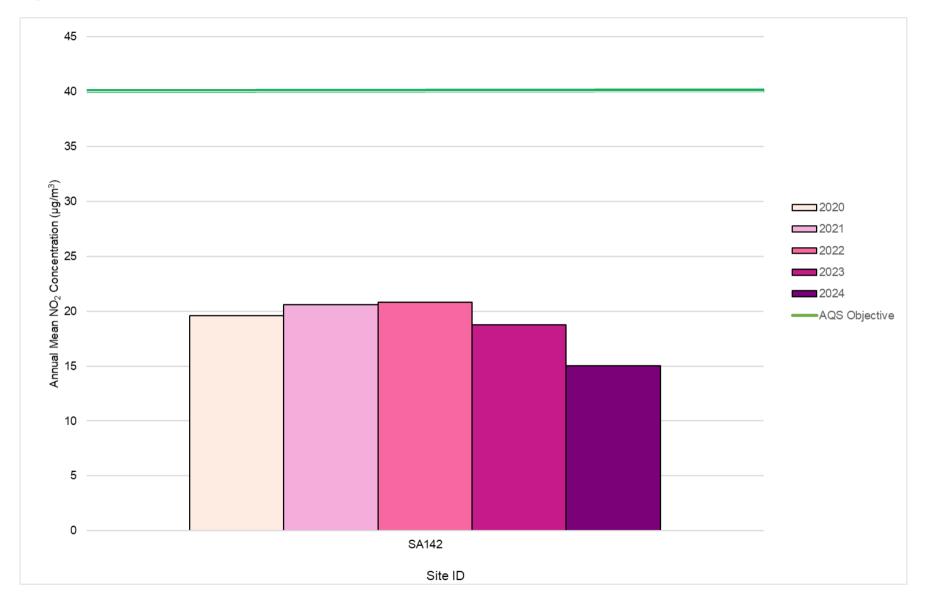


Figure A.4 – Trends in Annual Mean NO₂ Concentrations, Frogmore

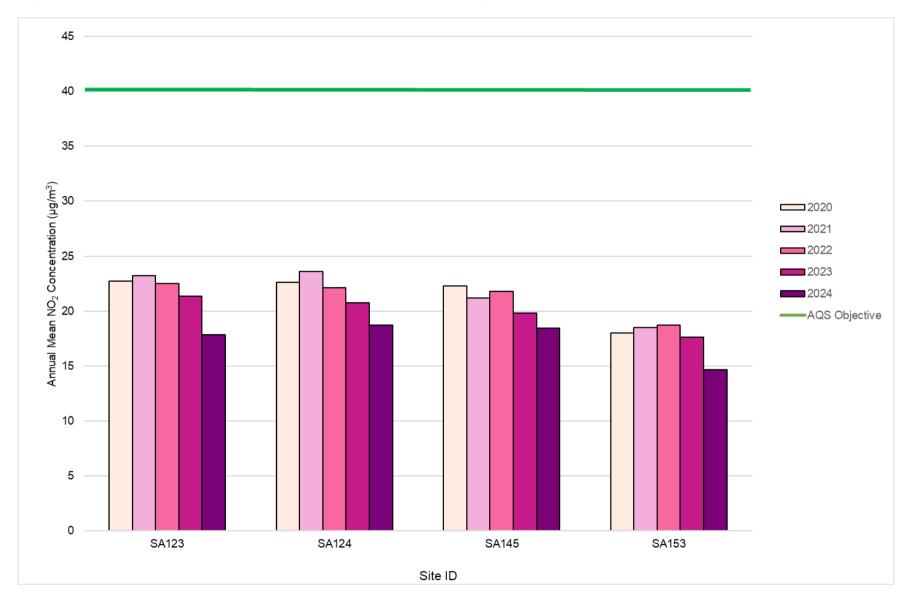


Figure A.5 – Trends in Annual Mean NO₂ Concentrations, Napsbury

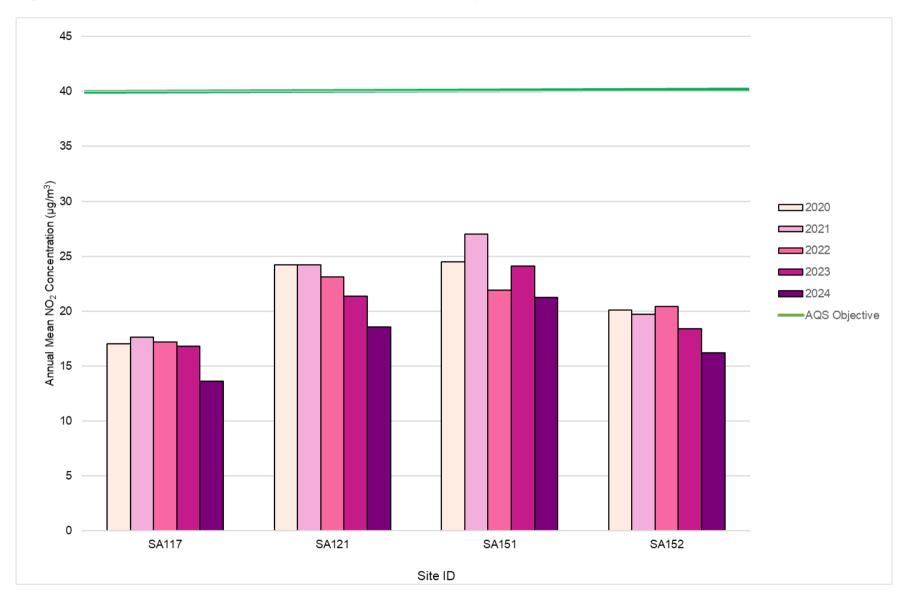
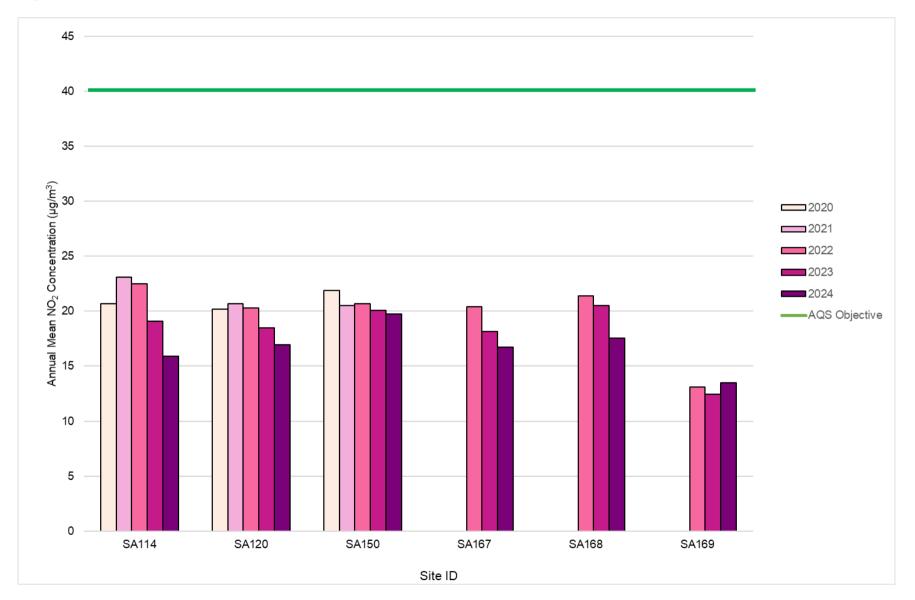


Figure A.6 – Trends in Annual Mean NO₂ Concentrations, St Albans East





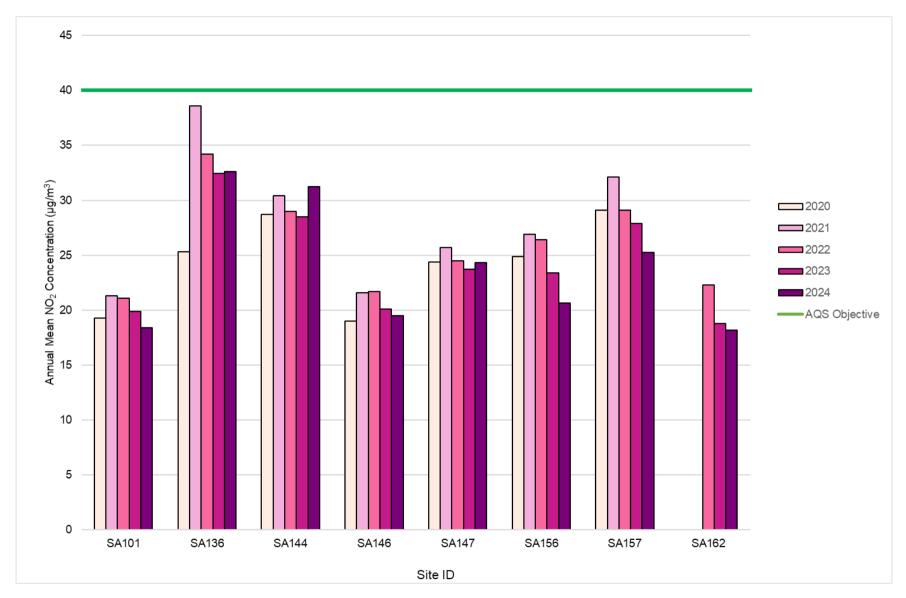


Figure A.8 – Trends in Annual Mean NO₂ Concentrations, Harpenden

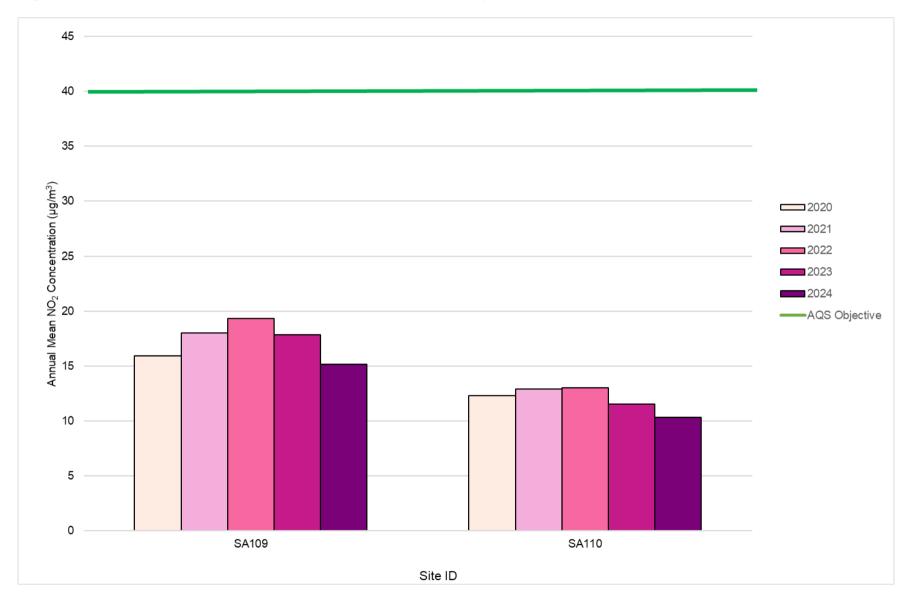


Figure A.9 – Trends in Annual Mean NO₂ Concentrations, Redbourn

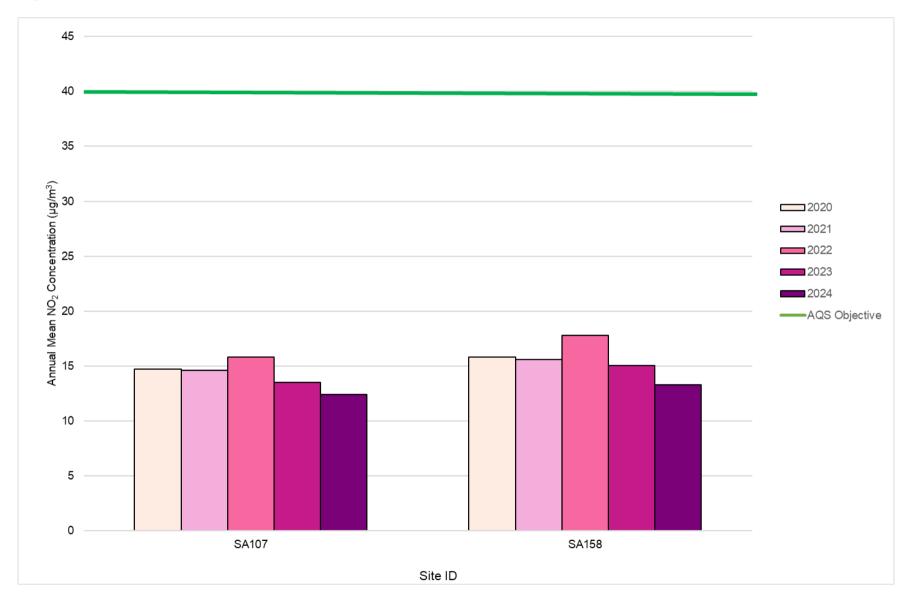


Figure A.10 – Trends in Annual Mean NO₂ Concentrations, Wheathampstead

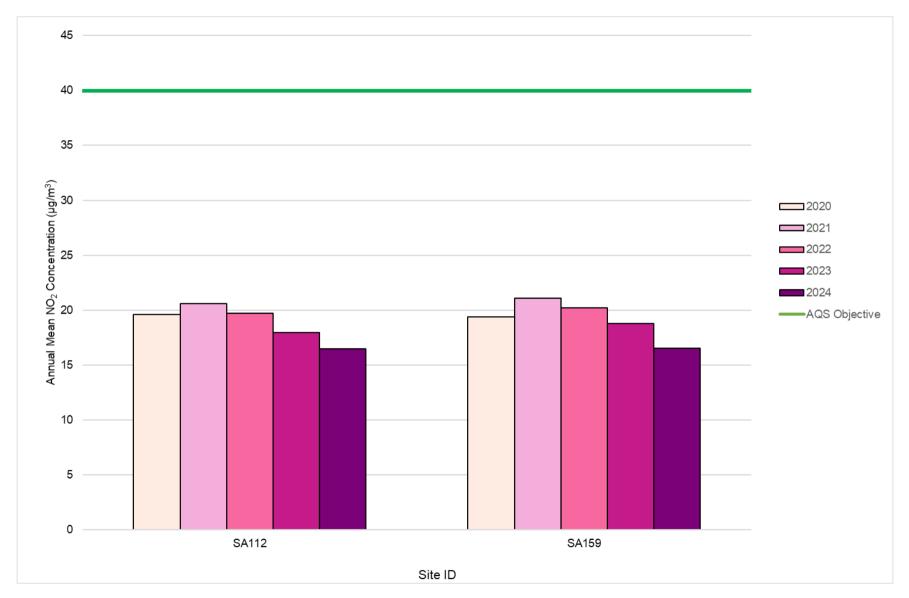
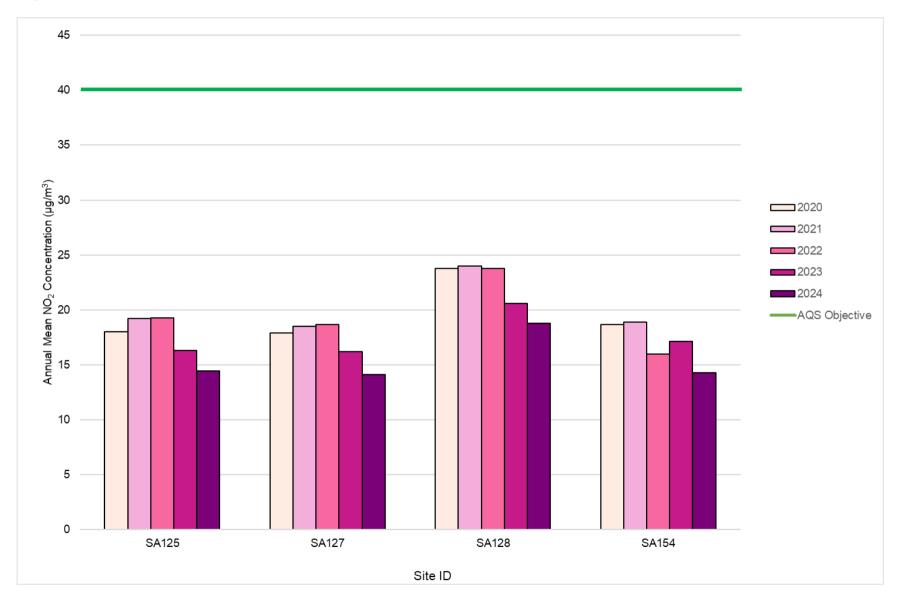


Figure A.11 – Trends in Annual Mean NO₂ Concentrations, Bricket Wood



Appendix B: Full Monthly Diffusion Tube Results for 2024

Table B.1 – NO₂ 2024 Diffusion Tube Results (µg/m³)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
SA101	515105	207476	22.1	25.4	20.9	19.5	21.6	21.0	19.9	17.8	22.7	22.8	27.1	21.8	21.9	18.4		
SA107	510138	212525	21.2	19.3	15.2	12.0	10.5	10.9	12.2	11.1	12.9	16.7	20.3		14.8	12.4		
SA109	513427	214308	23.8	19.0	18.1	15.8	14.8	13.2	15.0	13.9	19.2	16.4	26.9	20.2	18.0	15.1		
SA110	514438	214353	18.1	15.1	11.3	9.2	8.8	8.9	9.0	8.4	10.6	15.5	19.2	13.0	12.3	10.3		
SA112	517727	214041	25.2	22.2	20.6	17.3	18.4	15.3	17.2	15.5	18.8	21.6	23.3	19.8	19.6	16.5		
SA114	516549	207391	21.8	28.1	21.0	15.2	14.7	15.1	1	11.5	14.0	24.2	21.1	21.6	18.9	15.9		
SA117	517712	204782	19.4	19.0	16.8	12.9	13.8	12.8	13.8	12.0	16.0	19.1	23.3	15.6	16.2	13.6		
SA120	520053	206618	19.5	23.0	22.3	15.7	17.0	17.3	20.6	22.0	18.8	22.8	22.8	20.4	20.2	17.0		
SA121	514654	204546	25.3	25.4	22.4	19.3	23.3	21.4	23.0	16.2	14.7	22.8	29.2		22.1	18.6		
SA123	515311	202730	24.0	27.2	24.7	18.0	17.9	17.0	20.0	17.4	17.1	25.0	25.8	21.0	21.3	17.9		
SA124	515383	202528	22.2	24.4	22.7	21.0	23.9	21.3	21.3	17.4	20.6	23.7	28.3	20.6	22.3	18.7		
SA125	513308	202655	20.0	17.7	17.1	14.2	17.2	13.9	14.1	13.5	20.1	21.1	22.8	14.9	17.2	14.5		
SA127	512570	202716	18.7	19.5	17.3	13.4	14.8	-	14.2	13.7	16.4	19.5	22.3	14.7	16.8	14.1		
SA128	512004	202105	23.3	25.5	22.6	19.2	21.1	21.3	21.0	19.6	20.0	23.1	29.3	1	22.4	18.8		
SA133	514606	206801	26.2	27.0	22.8	24.1	25.0	22.4	23.5	18.1	22.4	24.8	29.7	22.0	24.0	20.2		
SA134	514648	206919	24.3	26.7	26.0	21.2	23.3	20.6	21.1	22.1	21.9	26.8	29.7	1	24.0	20.1		
SA135	515060	206866	25.1	26.4	23.3	17.6	21.1	22.1	19.6	18.9	21.7	25.3	28.6	22.4	22.7	19.0		
SA136	514883	207422	33.7	37.8	40.2	39.2	43.8	37.4	41.3	38.8	44.9	37.5	40.7	30.9	38.8	32.6		
SA137	514684	207105	29.3	32.9	35.0	29.3	27.0	27.0	31.7	31.3	28.0	34.9	36.1	29.4	31.0	26.0		

LAQM Annual Status Report 2025

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
SA138	514701	207082	27.8	34.3	-	-	-	-	34.3	28.3	30.8	35.2	34.0	27.5	31.5	24.4		
SA140	515185	207070	21.2	21.2	19.4	13.8	15.5	12.4	14.3	12.7	-	23.7	24.8	18.7	18.0	15.1		
SA141	514722	207226	19.5	19.8	18.1	13.6	15.7	12.2	14.1	-	15.4	21.9	21.5	-	17.2	14.4		
SA142	510754	206091	21.1	25.7	22.7	8.6	16.3	18.3	19.3	19.0	18.7	23.2	2.0	19.5	17.9	15.0		
SA143	514752	207094	29.0	30.7	25.7	27.6	28.2	28.4	25.5	22.5	33.5	30.1	34.3	26.6	28.5	23.9		
SA144	514833	207347	32.6	40.3	35.0	34.6	35.0	39.6	41.5	41.4	37.5	39.6	ı	31.6	37.2	31.2		
SA145	515257	202638	22.8	27.1	25.2	17.0	15.9	16.0	32.4	19.7	16.6	24.0	23.7	22.8	21.9	18.4		
SA146	514856	207353	26.6	29.3	22.5	22.6	-	-	21.2	-	-	-	30.3	25.2	25.4	19.5		
SA147	514818	207357	27.2	30.1	26.2	28.6	29.2	31.1	28.8	24.9	32.5	30.1	31.7	27.0	29.0	24.3		
SA148	514705	207119	36.0	42.8	38.6	39.5	37.5	40.1	39.8	35.1	36.1	41.1	39.0	34.8	38.4	32.2		
SA149	515067	206946	23.5	24.8	23.1	18.0	18.9	15.6	19.3	17.3	23.0	28.9	27.7	17.4	21.4	18.0		
SA150	516590	207276	23.0	27.3	23.3	18.4	20.7	23.1	22.7	22.4	22.2	28.5	28.5	21.8	23.5	19.7		
SA151	518782	203507	24.9	29.5	28.1	18.6	24.2	22.8	25.1	23.7	21.9	32.3	28.0	24.1	25.3	21.2		
SA152	517091	204114	21.8	22.7	19.2	13.9	16.6	17.4	18.1	17.5	17.4	23.0	24.7	19.6	19.3	16.2		
SA153	515275	202794	22.4	22.1	18.6	14.5	14.4	13.6	15.6	15.0	13.3	19.4	22.5	17.8	17.4	14.6		
SA154	512776	202050	19.5	-	17.8	13.2	14.8	14.1	15.8	13.9	16.4	20.9	23.3	17.2	17.0	14.3		
SA155	514346	206329	22.9	27.6	24.4	18.4	20.3	19.1	23.6	23.7	-	27.0	24.7	22.6	23.1	19.4		
SA156	514602	207674	-	27.7	21.8	20.6	24.6	22.8	20.6	18.2	28.1	28.7	34.8	22.3	24.6	20.6		
SA157	514840	207613	29.8	34.9	25.9	26.7	28.3	26.3	27.6	22.8	32.9	36.9	40.7	28.1	30.1	25.3		
SA158	510818	212167	20.2	19.7	16.4	12.7	12.4	13.0	12.3	11.7	15.2	18.4	21.8	15.9	15.8	13.3		
SA159	517727	213901	22.8	23.7	22.4	17.1	18.5	19.0	19.2	17.9	15.6	18.8	22.4	18.4	19.7	16.5		

LAQM Annual Status Report 2025

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
SA160	514682	207060	38.0	41.3	38.3	40.5	43.3	48.5	43.8	38.7	39.6	38.9	44.7	41.4	41.4	34.8		
SA161	514787	207069	26.3	30.2	26.8	22.6	24.3	24.0	22.2	23.5	24.3	33.7	30.3	24.8	26.1	21.9		
SA162	514596	207338	24.6	22.1	23.1	-	-	-	18.1	16.1	19.5	24.9	28.3	18.1	21.6	18.2		
SA163	514646	206942	36.5	39.6	40.3	40.5	37.2	39.3	37.8	35.6	39.1	33.1	40.6	38.6	38.2	32.1		
SA164	515024	207071	22.8	23.7	17.8	15.0	16.2	14.3	16.1	14.4	18.7	24.5	26.3	23.8	19.5	16.3		
SA165	515316	206719	-	26.2	25.1	21.4	26.2	24.2	22.7	19.8	23.0	28.2	27.4	21.5	24.1	20.3		
SA166	515144	206984	22.5	22.5	21.0	14.6	14.7	11.8	14.4	12.9	17.0	24.1	24.3	19.2	18.3	15.3		
SA167	515990	207769	22.5	22.9	20.4	17.0	17.4	16.1	14.8	15.0	20.5	22.7	27.5	22.1	19.9	16.7		
SA168	516144	207318	25.1	25.5	23.9	17.5	17.0	17.6	18.1	16.8	20.5	24.8	27.7	15.9	20.9	17.5		
SA169	516887	207702	17.7	16.6	-	9.4	10.2	8.3	9.7	8.8	9.9	16.4	19.7	50.1	16.1	13.5		

- ☑ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table B.1.
- ☑ Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.
- ☐ Local bias adjustment factor used.
- **☒** National bias adjustment factor used.
- **☑** Where applicable, data has been distance corrected for relevant exposure in the final column.
- ☑ St Albans 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 40 $\mu g/m^3$ are shown in **bold**.

 NO_2 annual means exceeding 60 μ g/m³, 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.

LAQM Annual Status Report 2025

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

New or Changed Sources Identified Within St Albans City & District Council During 2024

No new sources have been identified in 2024.

Additional Air Quality Works Undertaken by St Albans City & District Council During 2024

St Albans City & District Council has not completed any additional works in 2024.

QA/QC of Diffusion Tube Monitoring

The diffusion tubes used by St Albans City & District Council were supplied and analysed by Gradko Environmental Ltd, using a 20% TEA / Water solution. Gradko participate in the AIR NO₂ Proficiency Testing Scheme and their performance is publicly available on the Defra website.

Monitoring in 2024 was completed in adherence with the <u>2024 Diffusion Tube Monitoring</u> <u>Calendar</u>, whereby most changeovers were completed within ±2 days of the specified date.

Figure C. 1 St Albans bias adjustment factor

Stack Company Compan	National Diffusion Tube	Bias Adjust	ment Fa	icto	or Spreadsheet			Spreads	heet Ver	sion Numbe	г: 04/25
Step 1: Step 2: Step 3: Step 3: Step 4: Step 4: Step 5: Step	Data only apply to tubes exposed monthly and Whenever presenting adjusted data, you shot	I are not suitable for o	correcting indivent factor used	idual s	short-term monitoring periods he version of the spreadsheet	their imme	diate use.		att	ne end of Ju	ine 2025
Select A Preparation that Analyses Your Lubs Select a Preparation before from the Drop-Down List Select a Preparation maked from the Drop-Down List Select a Preparation maked from the Drop-Down List Select a Preparation maked from the Drop-Down List Proparation Maked from t		and the Devolved Admir	nistrations by Bu	reau V	eritas, in conjunction with contract partners				Physical I	_aboratory.	Original
### when the prop-Devry List Analyses Your Light Property Property	Step 1:	Step 2:	Step 3:				Step 4:				
Analysed By		Method from the Drop-	from the Drop-	WI							
Size Company Company	If a laboratory is not shown, we have no data for this laboratory.	shown, we have no data for	shown, we have no	lf						Air Quality M	anagement
Gradko 20% TEA in water 2024 R Belfast City Council 12 43 34 28.8% G 0.76	_	a unda yaurzelectian, chaaze (All) from the pop-up list	To undo your zoloction, choozo (All)		Local Authority	Study	Mean Conc.	Monitor Mean Conc. (Cm)	Bias (B)		Bias Adjustment Factor (A) (Cm/Dm)
Gradico 20X TEA in water 2024 R Belfast City Council 12 43 34 28.8% G 0.78	Gradko	20% TEA in water	2024	UV	Belfast City Council	10	24		19.9%	G	0.83
Gradko 20½ TEA in water 2024 R Belfast City Council 12 34 27 25.5½ G 0.80		20% TEA in water	2024	В		12	43	34	28.8%	G	0.78
Creativo 20% TEA in water 2024	Gradko	20% TEA in water	2024	В	Belfast City Council	12	24	21	13.9%	G	0.88
Stack 20 TEA in water 2024		20% TEA in water	2024	B			34	27		G	0.80
Creativo 20% TEA in water 2024	Gradko		2024	R	Blackburn With Darwen Bo	12	22	17	32.9%	G	0.75
Plymouth City Council 12 16 14 13.8% G 0.88	Gradko	20% TEA in water	2024	R	Bath & North East Somerset	12	25	20	22.6%	G	0.82
Product Prod	Gradko	20% TEA in water	2024	R	Cambridge City Council	12	19	15	28.5%	G	0.78
Stradko 20% TEA in water 2024 R Monmouthshire County Council 12 23 24 13.4% G 0.84	Gradko	20% TEA in water	2024	UB	Plymouth City Council	12	16	14	13.8%	G	0.88
Stradko 2017, TEA in water 2024 KS Marylebone Road Intercomparison 11 41 38 16.17; G 0.86	Gradko	20% TEA in water	2024	R	Plymouth City Council	12	31	23	33.4%	S	0.75
Stradko 20½ TEA in water 2024 R Lisbum 8. Castlereagh City Council 12 24 19 27.8½ G 0.78	Gradko	20% TEA in water	2024	R	Monmouthshire County Council	12	29	24	19.4%	G	0.84
Gradko 20½ TEA in water 2024 R Ards And North Down Borough Council 11 28 20 44.5½ G 0.69 Gradko 20½ TEA in water 2024 R Bastleigh Borough Council 12 29 24 20.3½ G 0.83 Gradko 20½ TEA in water 2024 R Bastleigh Borough Council 12 19 17 12.4½ G 0.83 Gradko 20½ TEA in water 2024 R Bastleigh Borough Council 12 19 17 12.0½ G 0.83 Gradko 20½ TEA in water 2024 R Bastehead Council 12 20 18 13.3½ G 0.83 Gradko 20½ TEA in water 2024 R Gateshead Council 11 20 17 13.7½ G 0.83 Gradko 20½ TEA in water 2024 R Gateshead Council 12 24 20 21.7½ G 0.82 Gradko 20½ TEA in water </td <td>Gradko</td> <td>20% TEA in water</td> <td>2024</td> <td>KS</td> <td>Marylebone Road Intercomparison</td> <td>11</td> <td>41</td> <td>36</td> <td>16.1%</td> <td>G</td> <td>0.86</td>	Gradko	20% TEA in water	2024	KS	Marylebone Road Intercomparison	11	41	36	16.1%	G	0.86
Stradko 20% TEA in water 2024 R Eastleigh Borough Council 12 23 24 20.3% G 0.83	Gradko	20% TEA in water	2024	R	Lisburn & Castlereagh City Council	12	24	19	27.8%	G	0.78
Gradko 20½ TEA in water 2024 UB Eastleigh Borough Council 12 19 17 12.4½ G 0.89 Gradko 20½ TEA in water 2024 R Bastleigh Borough Council 12 19 17 12.0½ G 0.88 Gradko 20½ TEA in water 2024 R Gateshead Council 12 20 18 13.3½ G 0.88 Gradko 20½ TEA in water 2024 R Gateshead Council 11 20 17 13.7½ G 0.88 Gradko 20½ TEA in water 2024 R Gateshead Council 11 20 17 13.7½ G 0.84 Gradko 20½ TEA in water 2024 R Gateshead Council 12 24 20 21.7½ G 0.84 Gradko 20½ TEA in water 2024 R Gateshead Council 12 27 23 19.0½ G 1.06 Gradko 20½ TEA in water 2024	Gradko	20% TEA in water	2024		Ards And North Down Borough Council						0.69
Gradko 20% TEA in water 2024 R Eastleigh Borough Council 12 19 17 12.0% G 0.89 Gradko 20% TEA in water 2024 R Gateshead Council 12 20 18 13.9% G 0.88 Gradko 20% TEA in water 2024 R Gateshead Council 11 20 17 19.7% G 0.88 Gradko 20% TEA in water 2024 R Gateshead Council 12 24 20 21.7% G 0.88 Gradko 20% TEA in water 2024 R Gateshead Council 12 24 20 21.7% G 0.88 Gradko 20% TEA in water 2024 R Gateshead Council 12 28 30 -6.0% G 0.88 Gradko 20% TEA in water 2024 R Gateshead Council 12 28 30 -6.0% G 1.06 Gradko 20% TEA in water 2024											0.83
Paradico 20½ TEA in water 2024 R Gateshead Council 12 20 18 13.9½ G 0.88											0.89
Gradko 20% TEA in water 2024 R Gateshead Council 11 20 17 19.7% G 0.84											0.89
Gradko 20% TEA in water 2024 R Gateshead Council 12 24 20 21.7%; G 0.82											0.88
Gradko 20½ TEA in water 2024 R Gateshead Council 12 27 23 19.0½ G 0.84 Gradko 20½ TEA in water 2024 R Gateshead Council 12 28 30 -6.0½ G 1.06 Gradko 20½ TEA in water 2024 R Bighton & Hove City Council 11 34 27 26.3½ G 0.73 Gradko 20½ TEA in water 2024 R Liverpool City Council 12 34 25 35.7½ G 0.74 Gradko 20½ TEA in water 2024 KS Liverpool City Council 10 52 47 10.2½ G 0.91 Gradko 20½ TEA in water 2024 R Notingham City Council 10 29 26 12.2½ G 0.98 Gradko 20½ TEA in water 2024 R Workson District Council 10 29 26 12,2½ G 0.98 Gradko 20½ TEA in water											0.84
Gradko 20½ TEA in water 2024 R Gateshead Council 12 28 30 -6.0½ G 1.06 Gradko 20½ TEA in water 2024 R Brighton & Hove City Council 11 34 27 26.3½ G 0.78 Gradko 20½ TEA in water 2024 R Liverpool City Council 12 34 25 35,7½ G 0.74 Gradko 20½ TEA in water 2024 R Nottingham City Council 10 52 47 10.2½ G 0.93 Gradko 20½ TEA in water 2024 R Nottingham City Council 10 29 26 12.2½ G 0.83 Gradko 20½ TEA in water 2024 R Wychavon District Council 10 23 26 14.7½ G 0.87 Gradko 20½ TEA in water 2024 R Wychavon District Council 10 23 26 14.7½ G 0.87 Gradko 20½ TEA in water											
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Diffusion Tube Annualisation

For sites with data capture below 75%, the <u>LAQM.TG(22)</u> states that the sites should be annualised. In 2024, sites with data capture lower than 75% were:

- SA138 (Peahen PH)
- SA146 (Forrester House)

The following continuous urban background monitors were used for annualisation, all having data capture higher than 85%, as required by the LAQM.TG(22):

- Borehamwood Meadow Park
- London Haringey Priory Park South
- Oxford St Ebbes
- London Hillingdon

A summary of this annualisation is provided in Table C.1.

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

Site ID	Annualisati on Factor Borehamw ood Meadow Park	Annualisati on Factor London Haringey Priory Park South	Annualisati on Factor Oxford St Ebbes	Annualisati on Factor London Hillingdon	Average Annualisatio n Factor	Raw Data Annua I Mean	Annualise d Annual Mean
SA138	0.8703	0.9349	0.9246	0.9570	0.9217	31.5	29.1
SA146	0.9056	0.8781	0.9164	0.9575	0.9144	25.4	23.2

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2024 ASR have been corrected for bias using an adjustment factor. Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LAQM.TG22 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from NO_x/NO₂ continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

St Albans City & District Council do not carry out continuous monitoring; therefore, there are no co-located sites to carry out local bias adjustment. St Albans City & District Council have therefore applied a national bias adjustment factor of 0.84 to the 2024 monitoring data. A summary of bias adjustment factors used by St Albans City & District 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	04/25	0.84
2023	National	04/24	0.81
2022	National	03/23	0.83
2021	National	05/21	0.84
2020	National	09/20	0.81

NO₂ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO₂ concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO₂ fall-off with distance calculator available on the LAQM Support website. There was no NO₂ fall-off with distance from the road required in 2024.

Appendix D: Maps of Monitoring Locations and AQMAs

Figure D.1 - Map of Non-Automatic Monitoring Site, AQMA 1 and St Albans Centre

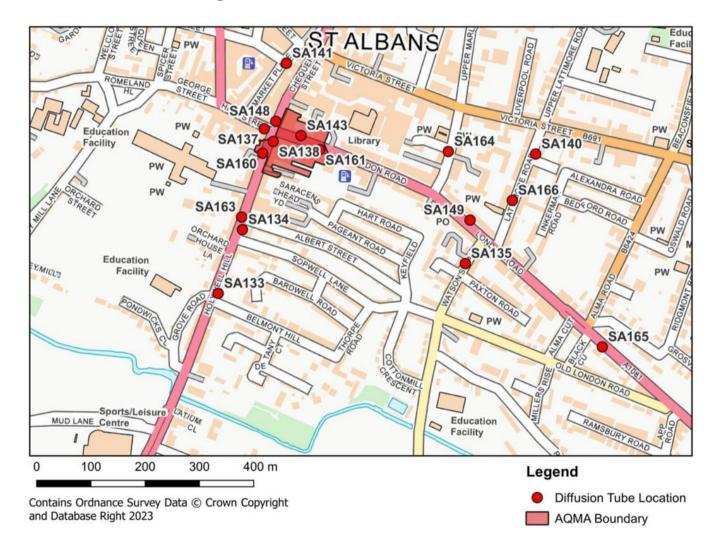


Figure D.2 – Map of Non-Automatic Monitoring Site, Potters Crouch

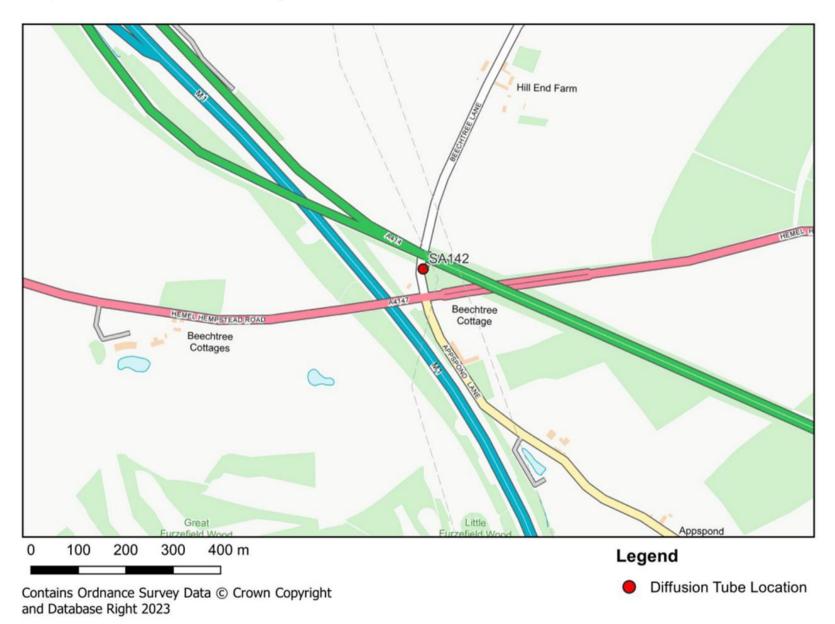


Figure D.3 – Map of Non-Automatic Monitoring Site, Frogmore

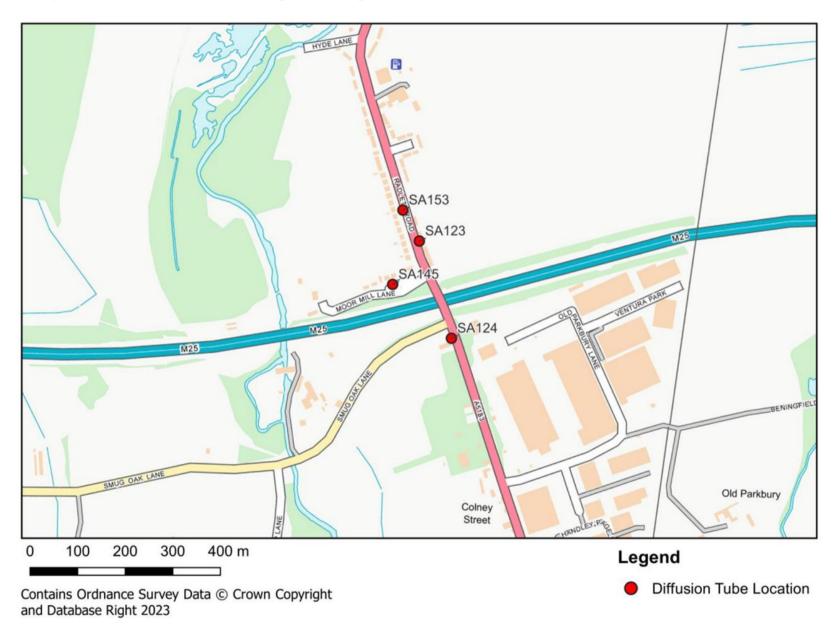


Figure D.4 – Map of Non-Automatic Monitoring Site, Napsbury

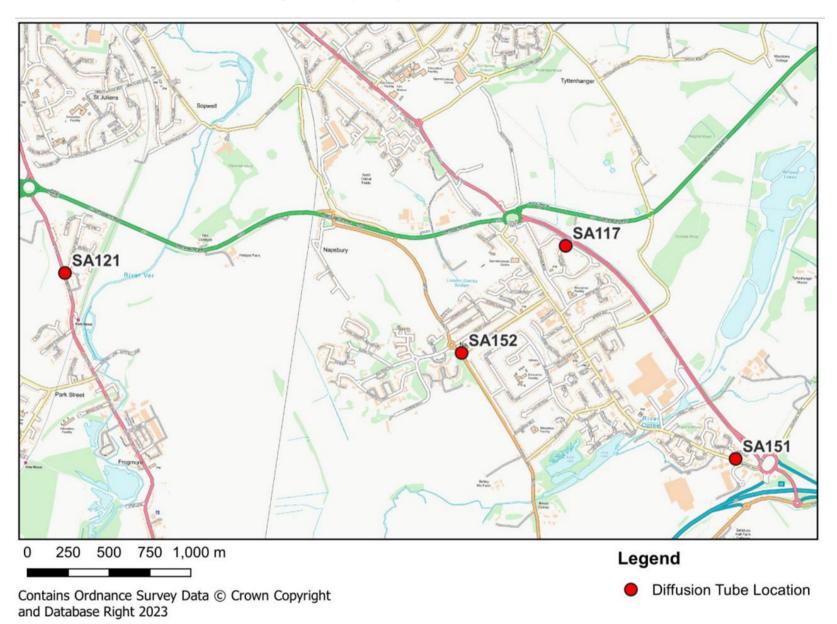


Figure D.5 – Map of Non-Automatic Monitoring Site, St Albans East

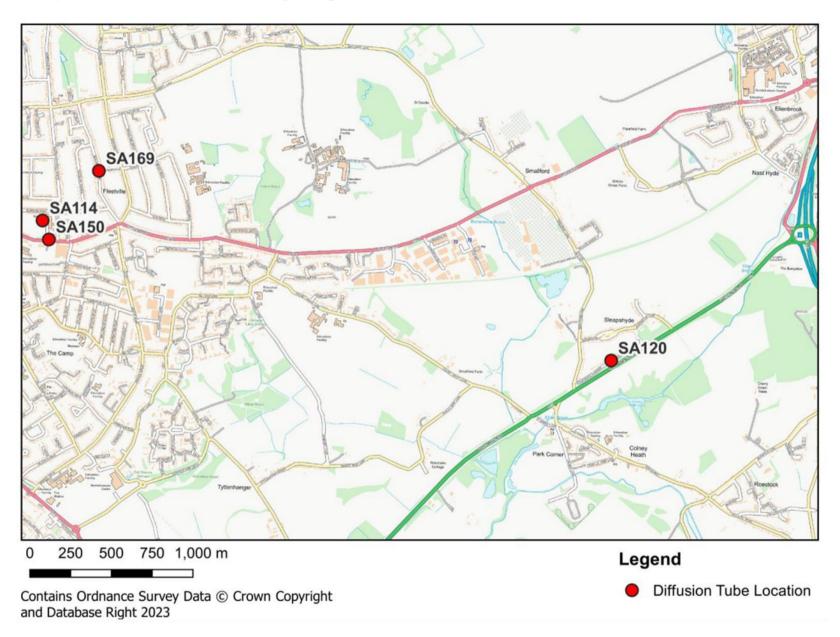


Figure D.6 – Map of Non-Automatic Monitoring Site, St Albans North

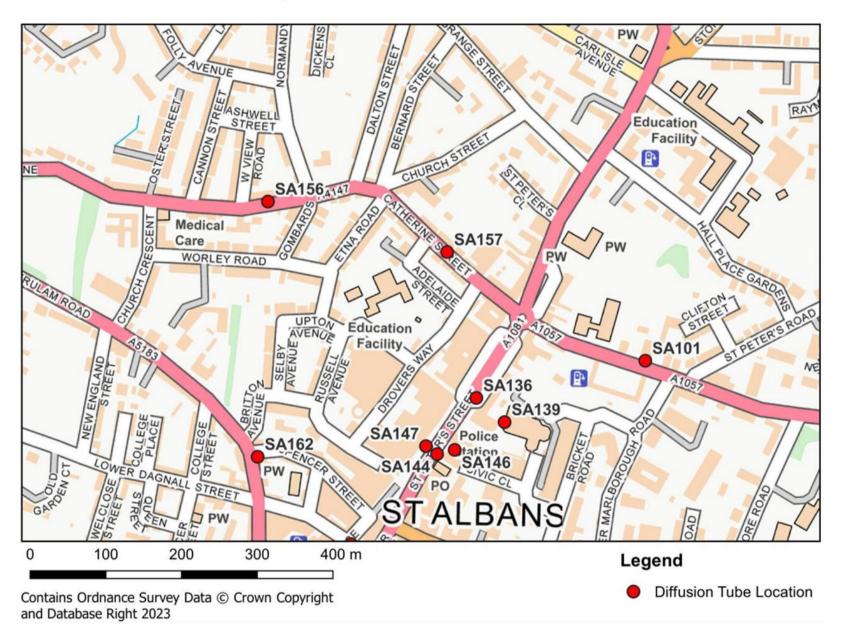


Figure D.7 – Map of Non-Automatic Monitoring Site, Harpenden

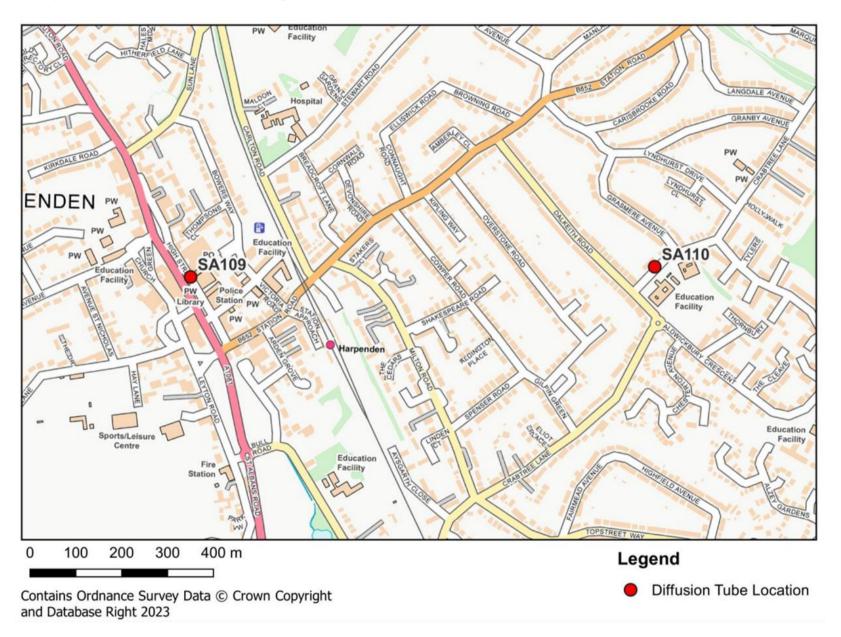
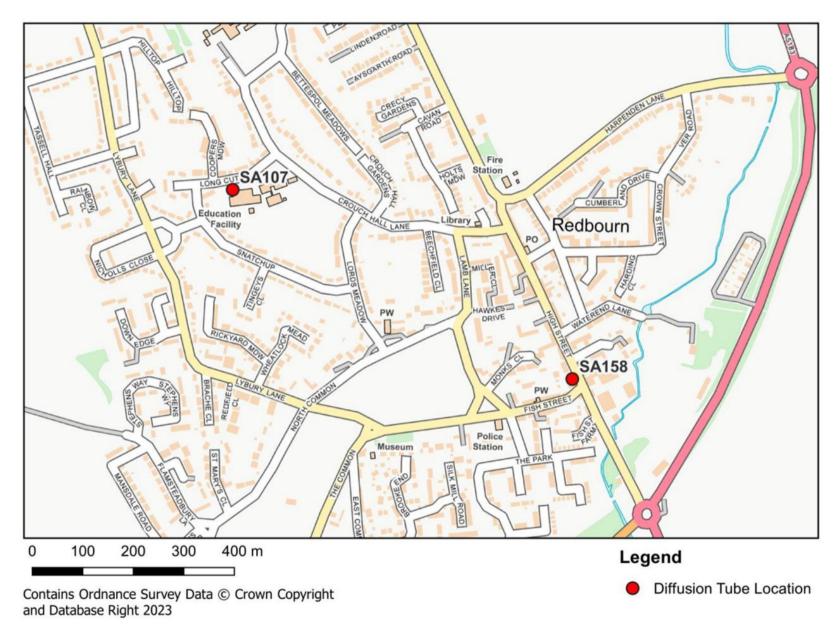


Figure D.8 – Map of Non-Automatic Monitoring Site, Redbourn



ABBOT JOHN HERONICL = DANES EKING EDWARD PLACE EFARM] SA112_EAS Wheathampstead BURY GRE SA159 PW Library Education Facility LOURTIMES GARRARD WAY OFFAS WAY CAESARS ROAL 100 200 300 400 m Legend **Diffusion Tube Location** Contains Ordnance Survey Data © Crown Copyright and Database Right 2023

Figure D.9 – Map of Non-Automatic Monitoring Site, Wheathampstead

Sports/Leisure Centre SA127 SA125 Black Green Bricket Wood NEWLYN CLOS SA128 Bricket Wood SA154 Bricket Wood 100 200 300 400 m Legend **Diffusion Tube Location** Contains Ordnance Survey Data © Crown Copyright and Database Right 2023

Figure D.10 - Map of Non-Automatic Monitoring Site, Bricket Wood

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England⁸

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO ₂)	200µg/m³ not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO ₂)	40μg/m³	Annual mean
Particulate Matter (PM ₁₀)	50µg/m³, not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM ₁₀)	40μg/m³	Annual mean
Sulphur Dioxide (SO ₂)	350μg/m³, not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO ₂)	125µg/m³, not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO ₂)	266μg/m³, not to be exceeded more than 35 times a year	15-minute mean

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

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
NOx	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.