South Cambridgeshire District Council

Air Quality Annual Status Report

Bureau Veritas

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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: July 2025

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Local Responsibilities and Commitment

This ASR was prepared by Bureau Veritas UK Ltd on behalf of the Environmental Planning Officer at South Cambridgeshire District Council with the support and agreement of the officers from Greater Cambridge Partnership and Cambridgeshire County Council.

This ASR is pending approval by:

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Jeremy Smith	Group Manager, Transport Strategy and Funding, Cambridgeshire County Council
Stephen Kelly	Joint Director of Greater Cambridge Shared Planning & 3C Building Control
Sally Cartwright	Director of Public Health, Cambridgeshire County Council
Niamh Matthews	Greater Cambridge Partnership

This ASR has been approved by the Director of Public Health.

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Executive Summary: Air Quality in Our Area

Air Quality in South Cambridgeshire District Council

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

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

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

Table ES 1 - Description of Key Pollutants

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

South Cambridgeshire District Council (SCDC) is a predominately rural district, surrounding the city of Cambridge. The district has good transport links to London and the southeast, including strategically important roads: M11, A11 and A14. The district is experiencing significant growth through residential developments in Waterbeach, Cambourne and Northstowe. It is also experiencing economic growth through its high concentration of high-tech businesses and biomedical companies.

Air quality in South Cambridgeshire is generally relatively good. There are currently no Air Quality Management Areas (AQMAs) in the district. From 2008 to 2022, an AQMA was present along the A14 from Bar Hill to Milton, but it has since been revoked.

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.

SCDC have expanded the diffusion tube monitoring network in 2024, with the introduction of 11 new sites. In 2018, SCDC adopted the current Local Plan 2031, which addresses air quality via Policy SC/12[1]. This policy highlights the focus on ensuring any current or future developments do not have adverse effects on air quality by carrying out Air Quality Assessments. This is particularly relevant to the 2024 reporting year as a new residential development has been identified within the district. Further details can be found in Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC.

SCDC is a partner in the Greater Cambridge Partnership (GCP), who are working on sustainable transport projects, which link SCDC with the city of Cambridge. The Greenway programme will deliver a network of 12 active travel routes between Cambridge and surrounding communities across South Cambridgeshire. The four GCP transport corridor schemes will deliver high quality public transport routes, including extensive stretches of offline busway, along with further walking and cycling improvements, between Cambridge and the surrounding area. In combination these schemes will enable model shift towards active travel and low/zero emission public transport.

SCDC have a Local Air Quality Strategy in place, joint with Cambridge City Council, titled Greater Cambridge Air Quality Strategy[2]. The strategy was published in line with guidance from LAQM PG.22, adopted in April 2024 and covers the period 2024 to 2029. The objectives of the strategy are to:

[1] South Cambridgeshire District Council. South Cambridgeshire Local Plan 2018, September 2018.

[2] Cambridge City Council & South Cambridgeshire District Council. Greater Cambridge Air Quality Strategy 2024-2029, April 2024.

- Continue to meet and deliver all the legislative and policy requirements associated with air quality.
- Continue to improve air quality across Greater Cambridge enhancing the health of those living in, working in and visiting Cambridge.
- Work towards World Health Organisation (WHO) Air Quality Guideline annual averages as longer-term targets with interim targets for delivery within lifetime of strategy (by 2029).

This will be achieved through four key priority areas:

- Key Priority 1: Regulatory Policies & Development Control
- Key Priority 2: Infrastructure Improvements
- Key Priority 3: Community Engagement & Promotion
- Key Priority 4: Monitoring

Table ES 2 presents a comparison between the UK Air Quality Objectives, the WHO guidelines, and the interim targets presented in the Greater Cambridge Air Quality Strategy, to be achieved within the area by 2029.

Table ES 2 - Comparison between UK Air Quality Objectives, Greater Cambridge Air Quality Strategy Targets, WHO Guidelines

Pollutant	Averaging Period	Concentration (µg/m^3)		
		UK Air Quality Standards Regulations Objective (2010)[3]	Greater Cambridge Air Quality Strategy Interim Target (2024)	WHO Air Quality Guidelines (2021)[4]
NO_2	Annual Mean	40	20	10
	1-Hour Mean	200	-	25
PM_{10}	Annual Mean	40	20	15
	24-Hour Mean	50	-	45
$PM_{2.5}$	Annual Mean	-	10	5
Target Year to be Achieved		**2024**	**2029**	**As soon as can be achieved**

Conclusions and Priorities

This Annual Status Report confirms that air quality within SCDC is generally good and continues to meet the relevant Air Quality Objectives.

In 2024, NO_2 concentrations remained below the annual Air Quality Objective of 40µg/m^3. As concentrations were below 60µg/m^3, it is considered that the hourly mean objective of 200µg/m^3 was not exceeded at any monitoring location. The highest concentration monitored was 22.4µg/m^3 at DT56, a new site this year. This is a roadside site, located on A1198 Kneesworth and is 6m away from relevant exposure. This concentration is just above the interim target for NO_2 set out in the Greater Cambridge Air Quality Strategy. It is also above the WHO guideline value.

Concentrations of PM_{10} also remained below the annual Air Quality Objectives of 40µg/m^3. The highest recorded PM_{10} concentration was 13.9µg/m^3 at Northstowe. This is a new

[3] Defra. Particulate matter (PM_{10}/$PM_{2.5}$), March 2025.

[4] WHO. WHO Air Quality Guidelines, September 2021.

roadside site, commissioned in the previous reporting year, 2023. This concentration is within both the Greater Cambridge Air Quality Strategy interim targets and WHO air quality guidelines.

Northstowe also recorded the highest $PM_{2.5}$ concentration, 7.9µg/m^3. This recorded concentration meets the Greater Cambridge Air Quality Strategy interim targets but is above the WHO air quality guidelines.

SCDC have an ambition to reach compliance with the WHO air quality guideline values. In the meantime, SCDC's priority is reaching the interim targets set out in the Greater Cambridge Air Quality Strategy by 2029. While these targets have been reached for some pollutants in some locations, the aim is to achieve these at all monitoring locations, despite the significant continued growth seen throughout the district.

How to get Involved

Previous ASRs from SCDC are available on the website. Links to pages containing automatic monitoring data are also available within the webpage.

As stated on the website, ways to get involved in improving air quality locally include:

- Minimise car use wherever possible.
- Avoid using your car for short trips (under 2 miles) - short trips are very polluting as modern engines need to reach a very high temperature to work efficiently; on short trips it won't reach that temperature.
- For short journeys, try cycling or walking more often – this helps you stay healthy and saves you money in fuel costs.
- For longer journeys, consider public transport options.
- Switch it off – don't leave your car engine idling if you are stationary, for example waiting to pick someone up, in a traffic jam or waiting at level crossings.
- When driving, use techniques that help you use less fuel, like driving more slowly and smoothly - and switching your engine off when stationary, this will not only reduce your emissions of air pollution but will save fuel and therefore money, too.
- Consider making your next vehicle an electric vehicle.
- Join a car club, or car-share regularly.
- Consider working at home where possible (the first lockdown showed widespread improvements in air quality, as the amount that people travelled reduced).
- Use less energy at home – consider a smart meter to monitor usage.

- Opt for ‘green energy’ tariffs where available or switch to renewable sources of heating or power.
- Reduce the use of solid fuel stoves and open fires – domestic burning is now the single biggest source of particulate matter pollution in the UK (greater than traffic and industry). If you are burning wood or coal, ensure any fuel used meets the new standards of moisture content and emissions.

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Figures

Tables

1 Local Air Quality Management

This report provides an overview of air quality in South Cambridgeshire District Council (SCDC) 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 SCDC 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.

SCDC currently does not have any declared AQMAs. A local Air Quality Strategy is in place to prevent and reduce polluting activities. The Local Air Quality Strategy is joint with Cambridge City Council, titled Greater Cambridge Air Quality Strategy[5] and is available via this link. The strategy was adopted in April 2024 and covers the period 2024 to 2029.

[5] Cambridge City Council & South Cambridgeshire District Council. Greater Cambridge Air Quality Strategy 2024-2029, April 2024.

2.1 Progress and Impact of Measures to address Air Quality in South Cambridgeshire District Council

The below section outlines the conclusions of Defra's appraisal of the 2024 ASR. Commentary on each appraisal item has been provided below.

- Comments from last year's ASR appraisal are not mentioned and addressed. This is encouraged in future reports. – The comments have been addressed in this ASR.
- SCDC has included extensive information on $PM_{2.5}$ in the borough and provided detailed discussion of trends and comparisons with the PHOF D01 indicator. Several measures the council are taking forward to address $PM_{2.5}$ were also listed. This level of detailed is welcomed. – Measures specific to $PM_{2.5}$ have been discussed in this year's ASR also.
- The Council has robust QAQC procedures, however clear justification on why the national bias adjustment factor has been used is not included. This is encouraged in future reports. – Clear justification of the use of the national bias adjustment factor has been included in this year's report.
- It is not explicitly stated if this ASR has been signed off by a Director of Public Health. This is not a requirement; however it is useful to have. Please take this into consideration of the next ASR submission in 2025. – The ASR has been signed off by a Director of Public Health.
- The Council provide clear trend graphs, which is commended. – These have been included in this year's ASR also.
- In Maps D.2, D.6 and D.14 it is difficult to read the names of each monitoring location site. The use of dark backgrounds makes the site location and ID difficult to see. This should be amended in future reports. – Lighter backgrounds have been utilised in the maps for this year's ASR.
- Overall, the report is detailed, concise and satisfies the criteria of relevant standards. The Council should continue their good work.

SCDC 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 2.1. Seventeen measures are included within

Table 2.1, with the type of measure and the progress SCDC 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 2.1.

More detail on these measures can be found in the Greater Cambridge Air Quality Strategy. Key completed measures are:

- Installation of electric vehicle charging points at SCDC offices – encourages use of electric vehicles by both council workers and members of the public.
- A14/M11 realignment – re-prioritising road space away from private cars.

SCDC expects the following measures to be completed over the course of the next reporting year:

- Zephyr School Monitoring Projects: a public information campaign involving the use of low cost sensors at points of interest in the area and producing reports which are available on the South Cambridge District Council website.

SCDC's priorities for the coming year are:

- To continue the development of the Low Emission Strategy.
- To continue the development of the twelve Greenways leading from SCDC into the city of Cambridge.

SCDC worked to implement these measures in partnership with the following stakeholders during 2024:

- Greater Cambridge Partnership (GCP)
- Cambridgeshire County Council (CCC)
- Cambridgeshire and Peterborough Combined Authority (CPCA)
- National Highways
- Network Rail
- Cambridge City Council

The principal challenges and barriers to implementation that SCDC anticipates facing are uptake of the schemes by the public. SCDC recognises the importance of behavioural change and are developing a project to work with schools educating young people and their families on the small actions we can all take to improve air quality. This is to supplement existing work including social media posts during Clean Air Day and Clean Air Night and articles in the South Cambridgeshire magazine to encourage reducing solid fuel burning.

SCDC anticipates that the measures stated above and in Table 2.1 – Progress on Measures to Improve Air Quality will ensure compliance is maintained in the area.

Table 2.1 – Progress on Measures to Improve Air Quality

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
1	Zephyr School Monitoring Projects	Public Information	Other	2021	2025	SCDC	SCDC	Funded	£10k - £50k	Implementation	Not possible to measure directly	Number of reports issued	Promoting air quality by producing reports based on monitoring by low cost Zephyr monitors at locations of interest, such as outside schools.	Seven reports completed and published on SCDC website as at the end of April 2024 (https://www.scambs.gov.uk/environmental-health/pollution/air-pollution/air-quality-monitoring)
2	Low Emission Strategy	Policy Guidance and Development Control	Low Emissions Strategy	2019	2022	SCDC Environmental Health Planning Department	Developer Contributions	Funded	<£10k	Implementation	Not possible to measure directly	Number of Planning permissions issued with Low Emission Strategy	In Progress ongoing - Low Emission Strategies required as per SC Local Plan 2018 and Sustainable Design & Construction SPD. This will incorporate measures such as EV charging and low NOx boilers at developments.	-
3	Greenways	Transport Planning and Infrastructure	Cycle network	2020	2027	Greater Cambridge Partnership (GCP)	Greater Cambridge Partnership (GCP)	Funded	>£10 million	Implementation	Not possible to measure directly	N/A	Various Greenways at different stages of implementation. See GCP for details of progress on individual projects. (https://www.greatercambridge.org.uk/sustainabl	A series of twelve Greenways feeding into Cambridge from SCDC allowing walkers, cyclists and other non-motorised vehicle users to travel safely and sustainably

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
													e-transport-programme/active-travel-projects/greater-cambridge-greenways)	
4	Electric Vehicle Charging community scheme	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2023	2025	SCDC	SCDC	Funded	£100k-£500k	Implementation	Not possible to measure directly	Number of charge points installed	The Electric Vehicle (EV) Charge Point Grant is available to fund installation of Electric Vehicle Charge Points (EVCPs) for use by the public, and related works, in the car parks of community buildings and village halls within South Cambridgeshire	-
5	A14 improvement - Junction 31-32 (EB & WB)	Traffic Management	Strategic highway improvements, Re-prioritising road space away from cars, including Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	2015	2015	Cambridgeshire County Council (CCC) Cambridgeshire and Peterborough Combined Authority (CPCA)	CCC	Funded	£100k - £500k	Completed	Not possible to measure directly	-	Completed Autumn 2015	-
6	A14/M11 re-alignment	Traffic Management	Strategic highway improvements, Re-prioritising road space	2016	2020	CCC/National Highways	CCC/National Highways	Funded	£1 million - £10 million	Completed	Not possible to measure directly	-	Completed 2020	-

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
			away from cars, including Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane											
7	Taxi Policies	Promoting Low Emission Transport	Taxi Licensing conditions	2023	2028	SCDC	SCDC	Funded	< £10k	Implementation	Not possible to measure directly	N/A	Restrictions on older vehicles and gradual introduction of policies to ensure a transition to zero emission vehicles	-
8	Cycle Plus Improvements	Transport Planning and Infrastructure	Cycle network	2020	2028	GCP	GCP	Funded	> £10 million	Implementation	Not possible to measure directly	N/A	Numerous improvements to the cycle network within SCDC and Cambridge City areas. Some projects implemented (Fulbourn/Cherry Hinton), some remain in planning. Some projects within City area only but impact traffic and sustainable transport from SCDC	-
9	Corridor Schemes	Transport Planning and Infrastructure	Bus route improvements	2020	2028	GCP, CPCA	GCP	Funded	> £10 million	Planning	Not possible to measure directly	N/A	Four corridor schemes to offer better public transport and active travel	Various schemes at different stages of development. www.greatercambridge.org.uk/susta

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
													routes along corridors, identified as essential to link growing communities in the north, south, east and west.	inable-transport-programme/public-transport-schemes
10	Travel Hubs	Alternatives to private vehicle use	Bus based Park & Ride	2019	2026	GCP	GCP	Funded	> £10 million	Planning	Not possible to measure directly	N/A	Travel hubs associated with corridor schemes	-
11	New railway station for Waterbeach	Other	Other	2020	2027	GCP / Network Rail / CPCA	GCP / Network Rail	Funded	> £10 million	Planning	Not possible to measure directly	N/A	Relocation of Waterbeach train station to facilitate sustainable transport from major residential development	-
12	Council Fleet transition to Electric Vehicles	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	-	2030	SCDC and Cambridge City	SCDC, Cambridge City and Cambridge and Peterborough Combined Authority	Funded	£1 million - £10 million	Planning	Not possible to measure directly	N/A	Planned upgrade of all fleet vehicles to electric. The Councils are delivering the £5.7m Waterbeach Depot Solar Park project, including funding from the CPCA. This will enable more of the waste collection fleet to go electric	-
13	Electric Vehicle Charging at Council Offices	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission	2022	2023	SCDC	SCDC	Funded	£50k - £100k	Completed	Not possible to measure directly	N/A	Installing electric vehicle charge points at Council offices in Cambourne for staff and public	-

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
			Vehicles, EV recharging, Gas fuel recharging										use, including bays for taxi	
14	Air Quality promotional work	Public Information	Other	2022	2024	SCDC	SCDC	Funded	< £10k	Implementation	Not possible to measure directly	N/A	Social media posts during campaigns (clean air day and clean air night) as well as articles in the South Cambridgeshire residents magazine and in the Zero Carbon Communities newsletters	-
15	Air Quality at schools project	Public Information	Other	2023	2026	SCDC, Cambridgeshire and Peterborough Combined Authority, CCC	SCDC and Section 106	Funded	< £10k	Planning	5% reduction outside schools	Measured reduction in pollution	Presentations and workshops in schools together with anti-idling events and monitoring	-
16	Camshare	Alternatives to private vehicle use	Car & lift sharing schemes	2012	2040	Cambridgeshire County Council (CCC)	CCC	Partially Funded	£1 million - £10 million	Implementation	Not possible to measure directly	N/A	Over 6,000 members for schemes covering the Greater Cambridge area	https://liftshare.com/uk/community/camshare
17	County Electric Vehicle Strategy and LEVI funding	Promoting Low Emission Transport	Refuelling infrastructure to promote Low Emissions Vehicles, EV, recharging, Gas fuel recharging	2023	2040	Cambridgeshire County Council (CCC)	Office for Low Emission Vehicles (OLEV)	Partially Funded	£1 million - £10 million	Planning	Not possible to measure directly	N/A	County wide EV strategy including the implementation of LEVI funding to increase EV charging infrastructure, especially in	-

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
													rural areas (such as much of SCDC) where commercial projects are unlikely to be financially attractive	

1.1 $PM_{2.5}$ – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy[6], local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter ($PM_{2.5}$). There is clear evidence that $PM_{2.5}$ (particulate matter smaller 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

SCDC undertakes monitoring for $PM_{2.5}$ at all its automatic monitors. The results are presented in 3.2.3. SCDC also has a number of low-cost Zephyr sensors that can monitor $PM_{2.5}$ and can be used to identify hotspots or areas where action may be required.

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

- Taxi Policy to encourage low emission vehicles.
- Twelve Greenways feeding into Cambridge.
- Promote reduced and/or better burning.

These are all presented in Table 2.1 in more detail. Although SCDC does not have any Smoke Control Areas, measures to highlight the risks of solid fuel burning will continue to be taken and studies to identify areas of high risk will also be taken forward.

The Office for Health Improvement and Disparities reports the health impacts of $PM_{2.5}$ through the fraction of mortality attributed to particulate air pollution. This was reported as 5.3% for South Cambridgeshire in 2023 (the most recently available data)[7].

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

[7] Department of Health and Social Care. Fraction of mortality attributable to particulate air pollution (new method), 2023.

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

This section sets out the monitoring undertaken within 2024 by SCDC 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.

Summary of Monitoring Undertaken

1.1.1 Automatic Monitoring Sites

SCDC undertook automatic (continuous) monitoring at three sites during 2024. Table A.1 in Appendix A shows the details of the automatic monitoring sites.

Local authorities do not have to report annually on the following pollutants: 1,3 butadiene, benzene, carbon monoxide and lead, unless local circumstances indicate there is a problem. The https://scambs-airquality.ricardo-aea.com/ page presents automatic monitoring results for South Cambridgeshire District Council, with automatic monitoring results also available through the UK-Air website .

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

1.1.2 Non-Automatic Monitoring Sites

SCDC undertook non- automatic (i.e. passive) monitoring of NO_2 at 37 sites during 2024. Table A.2 in Appendix A presents the details of the non-automatic sites.

Maps showing the location of the monitoring sites are provided in Appendix D: Map(s) of Monitoring Locations and AQMAs 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.

1.2 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.

1.1.3 Nitrogen Dioxide (NO_2)

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

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

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

In 2024, diffusion tubes recorded no exceedances of the NO_2 air quality objective in SCDC. The highest recorded concentration was 22.4µg/m^3 at DT56, a new site this year. This is significantly below the UK air quality objective annual mean of 40µg/m^3. This concentration is just above the interim target for NO_2 set out in the Greater Cambridge Air Quality Strategy. It is also above the WHO guideline value of an annual average concentration of 10 µg/m^3. As concentrations were below 60µg/m^3 it is considered that the hourly mean objective of 200µg/m^3 was not exceeded at any locations.

There were also no exceedances of the annual mean or hourly mean recorded at any of the automatic monitoring stations during 2024. This was also the case in 2023.

In Table 3.1 below, comparisons are shown between the 2024 diffusion tube dataset and the 2023 dataset.

Table 3.2 - Comparison of Diffusion Tube NO_2 Concentrations Between 2023 and 2024

Diffusion Tube ID	2023 NO_2 Monitoring Result	2024 NO_2 Monitoring Result	Increase / Decrease between 2023-24	Difference ($\mu g/m^3$)
DT2	17.5	18.3	Increase	+0.8
DT4	15.0	15.6	Increase	+0.5
DT-6N	13.7	13.0	Decrease	-0.7
DT-8N	11.3	10.6	Decrease	-0.7
DT13	11.6	11.2	Decrease	-0.4
DT14	15.1	15.0	Decrease	-0.1
DT15	15.1	10.5	Decrease	-4.6
DT17	-	8.1	-	-
DT22	11.7	11.2	Decrease	-0.5
DT28	11.0	10.8	Decrease	-0.2
DT-28N	13.4	14.3	Increase	+0.9
DT29	6.9	7.2	Increase	+0.3
DT-32N	13.8	14.4	Increase	+0.6
DT34	8.9	9.0	Increase	+0.1
DT37	13.2	13.0	Decrease	-0.2
DT38	10.3	9.8	Decrease	-0.5
DT40	10.3	9.6	Decrease	-0.7
DT41	15.9	12.5	Decrease	-3.4
DT42	11.4	11.8	Increase	+0.4
DT43	10.7	11.5	Increase	+0.8

Diffusion Tube ID	2023 NO_2 Monitoring Result	2024 NO_2 Monitoring Result	Increase / Decrease between 2023-24	Difference ($\mu g/m^3$)
DT44	12.2	12.9	Increase	+0.7
DT45	11.8	13.4	Increase	+1.6
DT46	13.3	12.5	Decrease	-0.8
DT47	11.4	12.6	Increase	+1.2
DT48	-	20.6	-	-
DT49	-	19.5	-	-
DT50	9.6	11.5	Increase	+1.9
DT52	-	9.9	-	-
DT53	-	9.8	-	-
DT54	-	12.3	-	-
DT55	-	20.9	-	-
DT56	-	22.4	-	-
DT57	-	18.0	-	-
DT58	-	14.8	-	-
DT59	-	9.5	-	-
DT60	-	7.4	-	-
DT61	-	9.8	-	-

Table 3.1 shows that of the 23 comparable diffusion tubes, 12 (52%) recorded higher concentrations in 2024 when compared with 2023. The largest observed increase was +1.9$\mu g/m^3$. The remaining 11 (48%) showed a decrease, the largest being -4.6$\mu g/m^3$.

Table 3.3 - Comparison of NO_2 Concentrations Between 2020-24

Diffusion Tube ID	2020 NO_2 Monitoring Result	2024 NO_2 Monitoring Result	Increase / Decrease between 2020-24	Difference ($\mu g/m^3$)
DT2	19.7	18.3	Decrease	-1.4
DT4	16.5	15.6	Decrease	-0.9
DT-6N	15.1	13.0	Decrease	-2.1
DT-8N	12.3	10.6	Decrease	-1.7
DT13	11.5	11.2	Decrease	-0.3
DT14	20.2	15.0	Decrease	-5.2
DT15	13.4	10.5	Decrease	-2.9
DT17	-	8.1	-	-
DT22	13.3	11.2	Decrease	-2.1
DT28	14.1	10.8	Decrease	-3.3
DT-28N	18.8	14.3	Decrease	-4.5
DT29	8.4	7.2	Decrease	-1.2
DT-32N	19.0	14.4	Decrease	-4.6
DT34	-	9.0	-	-
DT37	-	13.0	-	-
DT38	-	9.8	-	-
DT40	-	9.6	-	-
DT41	-	12.5	-	-
DT42	-	11.8	-	-
DT43	-	11.5	-	-

Diffusion Tube ID	2020 NO_2 Monitoring Result	2024 NO_2 Monitoring Result	Increase / Decrease between 2020-24	Difference ($\mu g/m^3$)
DT44	-	12.9	-	-
DT45	-	13.4	-	-
DT46	-	12.5	-	-
DT47	-	12.6	-	-
DT48	-	20.6	-	-
DT49	-	19.5	-	-
DT50	-	11.5	-	-
DT52	-	9.9	-	-
DT53	-	9.8	-	-
DT54	-	12.3	-	-
DT55	-	20.9	-	-
DT56	-	22.4	-	-
DT57	-	18.0	-	-
DT58	-	14.8	-	-
DT59	-	9.5	-	-
DT60	-	7.4	-	-
DT61	-	9.8	-	-

Table 3.2 - Comparison of NO_2 Concentrations Between 2020-24 shows the longer-term trends (five years) in diffusion tube results in SCDC. Of the only 12 comparable sites, all of them showed decreased recorded concentrations in 2024 when compared to 2020. The largest decrease was -5.2$\mu g/m^3$ recorded at DT14.

For seven of the diffusion tube sites, data capture was less than 75%. Data capture was above 25% for these sites, therefore annualisation was carried out, details are in Appendix

C: Supporting Technical Information / Air Quality Monitoring Data QA/QC. No concentrations were found to be within 10% of the annual mean NO_2 Air Quality Objective, therefore distance correction was not required.

Data capture was above 75% for all automatic sites, therefore no annualisation was required. No concentrations were found to be within 10% of the annual mean Air Quality Objective, therefore distance correction was not required either.

1.1.4 Particulate Matter (PM_{10})

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

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

All recorded concentrations of PM_{10} are below the annual mean air quality objective of 40µg/m^3. The highest recorded concentration was 13.9µg/m^3 at Northstowe.

All sites were below the interim target of 20µg/m^3 set out in the Greater Cambridge air quality strategy. All sites were also below the WHO guideline value of 15µg/m^3.

The only monitoring station with PM_{10} data from the last 5 years, Impington, shows levels have remained relatively stable, with a slight decrease (-1.3µg/m^3) when comparing 2024 with 2023. Both Harston and Northstowe showed an increase in 2024 when compared to 2023, by +0.9µg/m^3 and +0.5µg/m^3 respectively, but recorded values are still well below the targets stated above.

1.1.5 Particulate Matter ($PM_{2.5}$)

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

All the monitoring stations in SCDC recorded annual $PM_{2.5}$ concentrations below the 12 µg/m^3 interim target for 2028 as well as the 10µg/m^3 target to be achieved by 2040 as part of The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023. All recorded concentrations are also below the interim target for 2029 from the Greater Cambridge Air Quality Strategy, which is also 10µg/m^3. However, all recorded

concentrations did exceed the WHO guideline value of 5µg/m^3. The highest recorded concentration was 7.9µg/m^3 recorded at Northstowe.

The only monitoring station with $PM_{2.5}$ data from the last 5 years, Impington, shows levels have decreased, by 2.8µg/m^3, when comparing 2020 and 2024 concentrations. Both Harston and Northstowe showed a decrease in 2024 when compared to 2023, by 1.4µg/m^3 and 0.3µg/m^3 respectively.

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Which AQMA? (1)	Monitoring Technique	Distance to Relevant Exposure (m) (2)	Distance to kerb of nearest road (m) (1)	Inlet Height (m)
IMP	Impington (A14)	Roadside	543739	261625	NO_2, PM_{10}, $PM_{2.5}$	No	N/A	Chemiluminescent; BAM; TEOM-FDMS	12.0	2.0	2.0
HARS	Harston (A10)	Roadside	542542	250940	NO_2, PM_{10}, $PM_{2.5}$	No	N/A	Chemiluminescent; TEOM-FDMS	14.0	4.5	2.0
NSTOW	Northstowe	Roadside	539897	267660	NO_2, PM_{10}, $PM_{2.5}$	No	N/A	Chemiluminescent; TEOM-FDMS	13.0	3.0	2.0

Notes:

(1) N/A if not applicable

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

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

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
DT2	High St, Histon	Roadside	543770	263678	NO_2	No	0.0	1.0	No	2.0
DT4	High St, Sawston	Urban Background	548600	249136	NO_2	No	0.5	1.0	No	2.0
DT-6N	22 High St, Linton	Roadside	555942	246680	NO_2	No	1.0	2.0	No	2.0
DT-8N	47 High St, Harston	Roadside	542555	251001	NO_2	No	5.0	2.0	No	2.0
DT13	Brook Close, Histon	Urban Background	543955	263588	NO_2	No	2.0	1.0	No	2.0
DT14	Water Lane, Histon	Roadside	544050	263306	NO_2	No	2.0	2.0	No	2.0
DT15	Cambridge Rd, Impington	Urban Background	544243	261819	NO_2	No	7.0	1.0	No	2.0
DT17	Sheepfold Lane, Upper Cambourne	Roadside	531300	260226	NO_2	No	3.0	2.0	No	2.0
DT22	Flack End, Orchard Pk	Roadside	545435	261906	NO_2	No	7.0	4.5	No	2.0
DT28	22 Topper St, Orchard Pk	Roadside	545169	261764	NO_2	No	4.0	0.5	No	2.0
DT-28N	Cambridge Road, Milton	Roadside	547436	262295	NO_2	No	15.0	2.0	No	2.0
DT29	Church Yard, Abington	Urban Background	552961	249251	NO_2	No	14.0	2.0	No	2.0

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
DT-32N	Banworth Lodge, A10	Roadside	548742	264698	NO_2	No	8.0	0.5	No	2.0
DT34	Jeavons Lane, Great Cambourne	Roadside	532092	259086	NO_2	No	6.0	1.0	No	2.0
DT37	Old Railway Tavern, Longstanton	Roadside	539851	268174	NO_2	No	2.0	3.0	No	2.0
DT38	High St, Longstanton	Roadside	539569	266845	NO_2	No	1.5	2.0	No	2.0
DT40	White Croft Road Meldreth	Roadside	537459	245587	NO_2	No	2.0	1.5	No	2.0
DT41	2 Mill Street Gamlingay	Roadside	542443	250755	NO_2	No	1.0	1.5	No	2.0
DT42	38a Mill Street Gamlingay	Roadside	523740	252081	NO_2	No	1.0	1.5	No	2.0
DT43	Mortlock Street. Melbourn	Roadside	538336	244625	NO_2	No	5.5	1.5	No	2.0
DT44	High Street Melbourn	Roadside	538268	244767	NO_2	No	0.0	2.0	No	2.0
DT45	High Street Harston	Roadside	542402	250737	NO_2	No	4.0	2.0	No	2.0
DT46	Station Road Shelford	Roadside	546498	252169	NO_2	No	1.0	2.0	No	2.0
DT47	Cambridge Rd, Shelford	Roadside	545631	253220	NO_2	No	11.0	1.0	No	2.0

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
DT48	Cambridge Road (north) Linton	Roadside	555862	246598	NO_2	No	2.0	2.0	No	2.0
DT49	Cambridge Road (south) Linton	Roadside	555884	246573	NO_2	No	2.0	2.0	No	2.0
DT50	Cambridge Road, Fulbourn	Roadside	551476	255933	NO_2	No	3.0	2.0	No	2.0
DT52	Lambs Lane Cottenham	Roadside	544700	267535	NO_2	No	2.0	2.0	No	2.0
DT53	Station Road, Waterbeach	Roadside	549931	265054	NO_2	No	2.0	3.0	No	2.0
DT54	High Street Cottenham	Roadside	545088	267586	NO_2	No	1.0	1.0	No	2.0
DT55	High Street Willingham	Roadside	540195	270063	NO_2	No	3.0	2.0	No	2.0
DT56	A1998 Kneesworth	Roadside	540543	266863	NO_2	No	6.0	2.0	No	2.0
DT57	High Street, Fen Ditton	Roadside	548582	260286	NO_2	No	2.0	2.0	No	2.0
DT58	High Street Swavesey	Roadside	536196	268795	NO_2	No	1.0	1.0	No	2.0
DT59	Weavers Field, Girton	Roadside	542429	261497	NO_2	No	5.0	2.0	No	2.0
DT60	Brockley Road Elsworth	Roadside	513529	263589	NO_2	No	12.0	2.0	No	2.0

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
DT61	High Street Over	Roadside	536198	268793	NO_2	No	1.0	2.0	No	2.0

Notes:

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

(2) N/A if not applicable.

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
IMP	543739	261625	Roadside	96.7	96.7	13	16	16	15.0	16.3
HARS	542542	250940	Roadside	99.7	99.7	-	-	-	12.1	10.7
NSTOW	539897	267660	Roadside	99.6	99.6	-	-	-	12.1	10.5

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

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

☒ **Where exceedances of the NO_2 annual mean objective occur at locations not representative of relevant exposure, the fall-off with distance concentration has been calculated and reported concentration provided in brackets for 2024.**

Notes:

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

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

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

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

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

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

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

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
DT2	543770	263678	Roadside	90.6	90.6	19.7	21.1	19.9	17.5	18.3
DT4	548600	249136	Urban Background	100.0	100.0	16.5	17.0	17.1	15.0	15.6
DT-6N	555942	246680	Roadside	100.0	100.0	15.1	16.5	15.8	13.7	13.0
DT-8N	542555	251001	Roadside	100.0	100.0	12.3	13.1	13.0	11.3	10.6
DT13	543955	263588	Urban Background	100.0	100.0	11.5	12.1	12.7	11.6	11.2
DT14	544050	263306	Roadside	100.0	100.0	20.2	17.1	17.7	15.1	15.0
DT15	544243	261819	Urban Background	100.0	100.0	13.4	11.9	11.7	15.1	10.5
DT17	531300	260226	Roadside	100.0	100.0	-	-	-	-	8.1
DT22	545435	261906	Roadside	100.0	100.0	13.3	13.5	14.2	11.7	11.2
DT28	545169	261764	Roadside	100.0	100.0	14.1	13.9	13.5	11.0	10.8
DT-28N	547436	262295	Roadside	83.0	83.0	18.8	17.3	15.1	13.4	14.3
DT29	552961	249251	Urban Background	92.5	92.5	8.4	7.8	8.0	6.9	7.2

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
DT-32N	548742	264698	Roadside	100.0	100.0	19.0	15.3	16.9	13.8	14.4
DT34	532092	259086	Roadside	100.0	100.0	-	12.3	10.3	8.9	9.0
DT37	539851	268174	Roadside	83.0	83.0	-	-	-	13.2	13.0
DT38	539569	266845	Roadside	100.0	100.0	-	-	-	10.3	9.8
DT40	537459	245587	Roadside	92.5	92.5	-	-	-	10.3	9.6
DT41	542443	250755	Roadside	100.0	100.0	-	-	-	15.9	12.5
DT42	523740	252081	Roadside	100.0	100.0	-	-	-	11.4	11.8
DT43	538336	244625	Roadside	100.0	100.0	-	-	-	10.7	11.5
DT44	538268	244767	Roadside	100.0	100.0	-	-	-	12.2	12.9
DT45	542402	250737	Roadside	100.0	100.0	-	-	-	11.8	13.4
DT46	546498	252169	Roadside	92.5	92.5	-	-	-	13.3	12.5
DT47	545631	253220	Roadside	100.0	100.0	-	-	-	11.4	12.6
DT48	555862	246598	Roadside	64.2	64.2	-	-	-	-	20.6

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
DT49	555884	246573	Roadside	100.0	100.0	-	-	-	-	19.5
DT50	551476	255933	Roadside	100.0	100.0	-	-	-	9.6	11.5
DT52	544700	267535	Roadside	100.0	100.0	-	-	-	-	9.9
DT53	549931	265054	Roadside	75.0	75.0	-	-	-	-	9.8
DT54	545088	267586	Roadside	92.5	92.5	-	-	-	-	12.3
DT55	540195	270063	Roadside	84.9	84.9	-	-	-	-	20.9
DT56	540543	266863	Roadside	92.5	92.5	-	-	-	-	22.4
DT57	548582	260286	Roadside	67.9	67.9	-	-	-	-	18.0
DT58	536196	268795	Roadside	92.5	92.5	-	-	-	-	14.8
DT59	542429	261497	Roadside	34.0	34.0	-	-	-	-	9.5
DT60	513529	263589	Roadside	66.0	66.0	-	-	-	-	7.4
DT61	536198	268793	Roadside	66.0	66.0	-	-	-	-	9.8

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

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

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

Notes:

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

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

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

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

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

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

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

Figure A.1 - Trends in Annual Mean NO_2 Concentrations

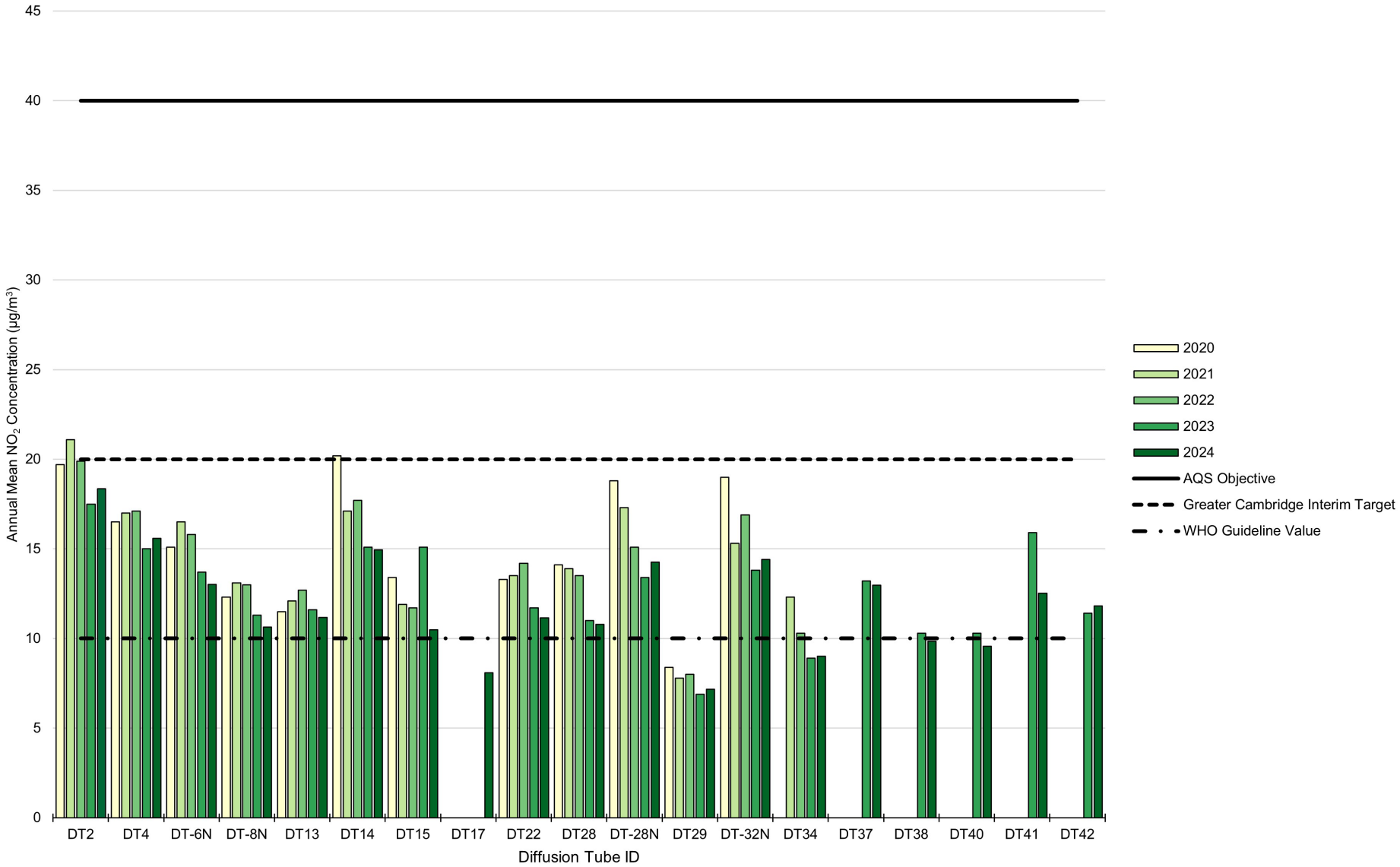


Figure A.2 - Trends in Annual Mean NO_2 Concentrations

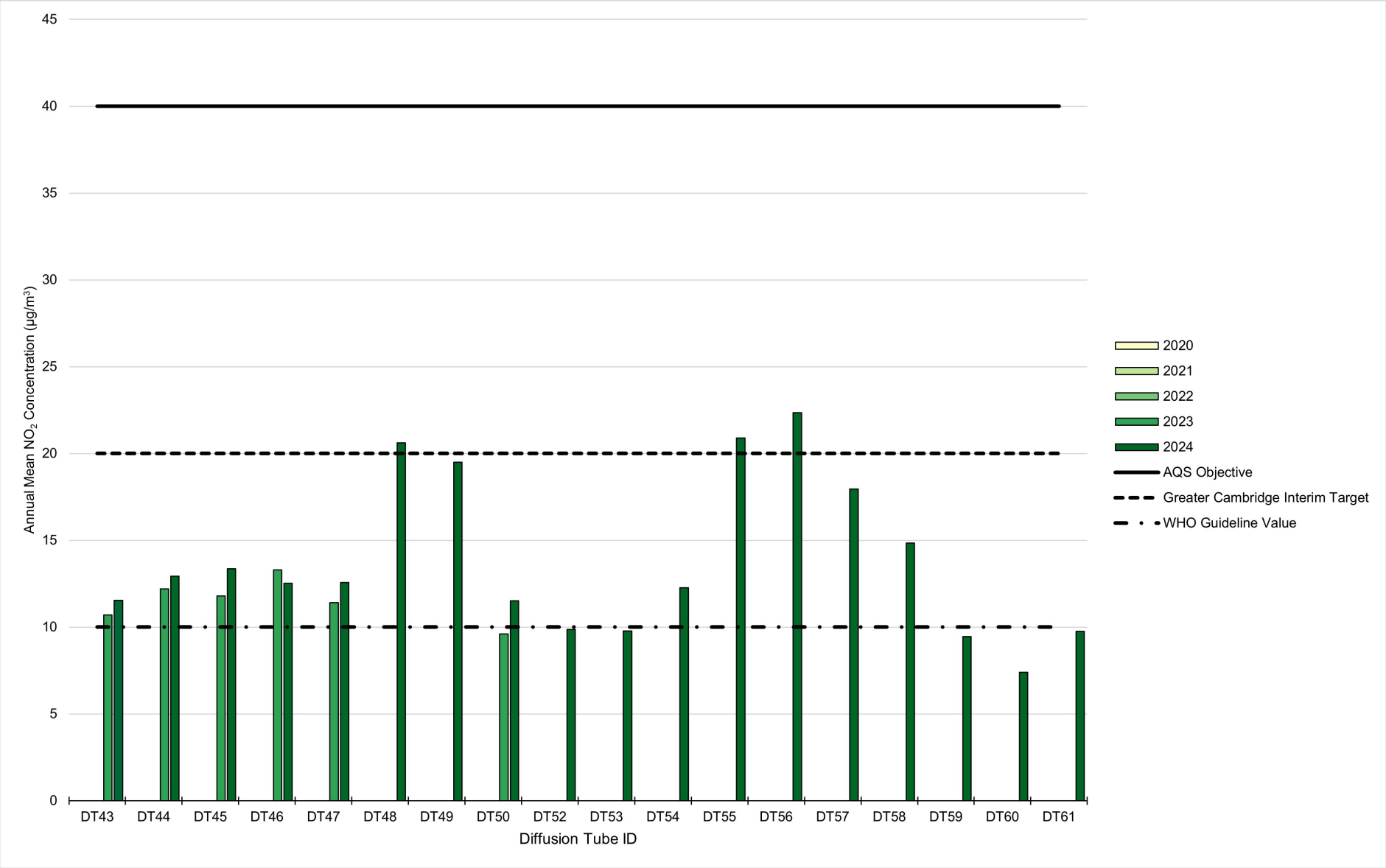


Table A.5 – 1-Hour Mean NO_2 Monitoring Results, Number of 1-Hour Means > 200µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
IMP	543739	261625	Roadside	96.7	96.7	0	0	0	0	0
HARS	542542	250940	Roadside	99.7	99.7	0	0	0	**0 (58)**	0
NSTOW	539897	267660	Roadside	99.6	99.6	0	0	0	**0 (51)**	0

Notes:

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

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

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

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

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

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
IMP	543739	261625	Roadside	93.6	93.6	15	15	18	15.6	13.7
HARS	542542	250940	Roadside	71.8	53.9	-	-	-	13.4	12.2
NSTOW	539897	267660	Roadside	85.7	64.4	-	-	-	-	13.9

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

Notes:

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

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

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

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

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

Figure A.3 - Trends in Annual Mean PM_{10} Concentrations

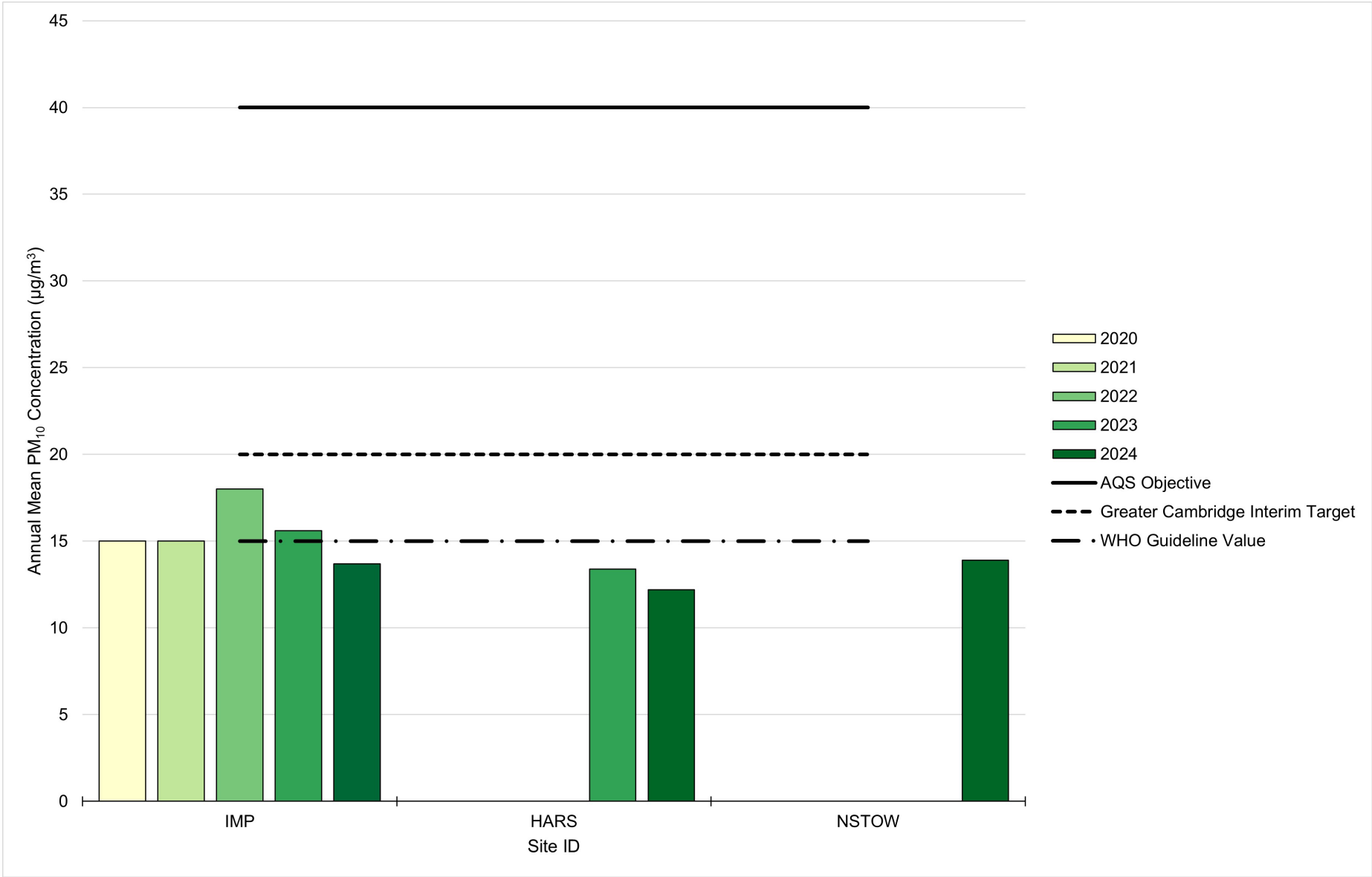


Table A.7 – 24-Hour Mean PM_{10} Monitoring Results, Number of PM_{10} 24-Hour Means > 50µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
IMP	543739	261625	Roadside	93.6	93.6	**0 (22)**	0	2 (28)	0	1
HARS	542542	250940	Roadside	71.8	53.9	-	-	-	0 (19)	0 (22)
NSTOW	539897	267660	Roadside	85.7	64.4	-	-	-	0 (12)	1 (24)

Notes:

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

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

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

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

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

Figure A.4 - Trends in Number of 24-Hour Mean PM_{10} Results > 50µg/m^3

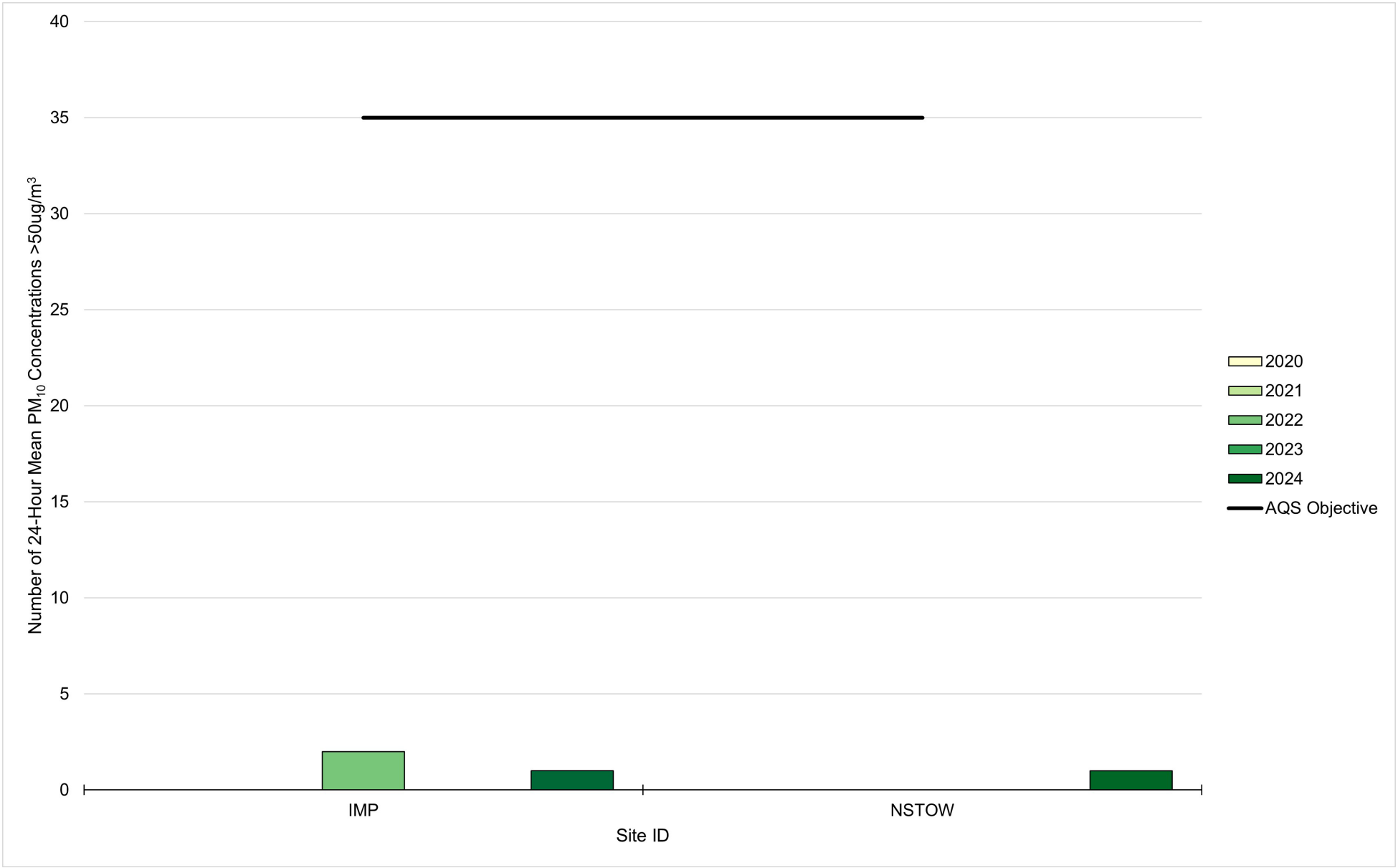


Table A.8 – Annual Mean $PM_{2.5}$ Monitoring Results ($\mu g/m^3$)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
IMP	543739	261625	Roadside	83.3	81.3	10	13	7.5	7.7	7.2
HARS	542542	250940	Roadside	80.9	80.9	-	-	-	8.2	7.5
NSTOW	539897	267660	Roadside	94.2	94.2	-	-	-	-	7.9

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

Notes:

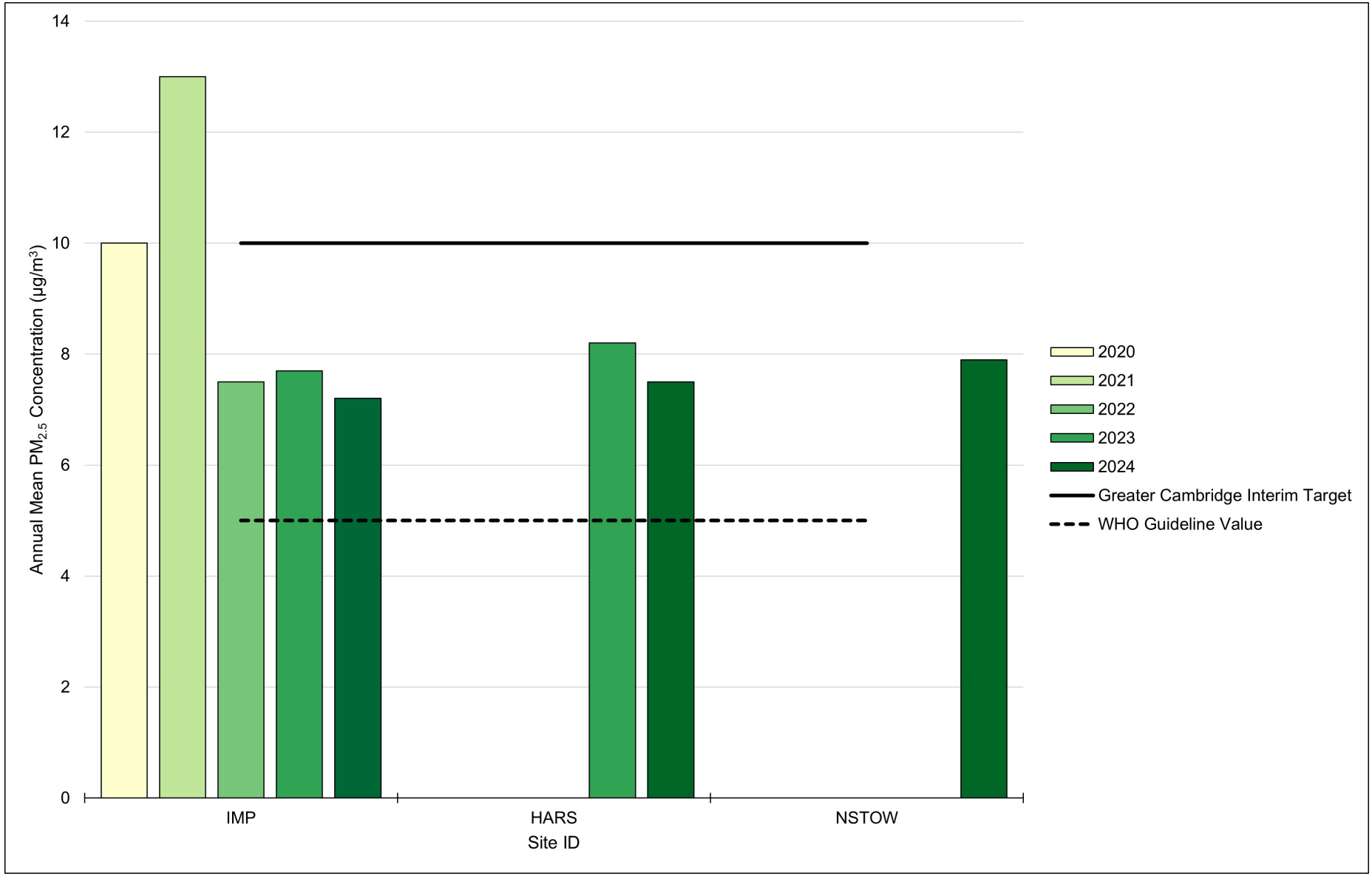
The annual mean concentrations are presented as $\mu g/m^3$.

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

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

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

Figure A.5 - Trends in Annual Mean $PM_{2.5}$ Concentrations



Appendix B: Full Monthly Diffusion Tube Results for 2024

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

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.78)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
DT2	543770	263678	30.9	23.2	25.2	-	18.3	20.6	22.4	19.7	17.7	28.6	28.6	-	23.5	18.3	-	April data omitted as anomalous. December tube missing
DT4	548600	249136	28.4	23.2	20.1	14.4	17.7	16.0	18.9	18.4	16.1	24.7	22.0	-	20.0	15.6	-	December data omitted as anomalous
DT-6N	555942	246680	24.9	17.9	19.1	11.5	14.0	12.0	13.4	13.2	16.2	18.8	22.6	-	16.7	13.0	-	December data omitted as anomalous
DT-8N	542555	251001	18.7	16.7	16.5	10.8	12.4	8.1	11.5	9.2	12.0	17.3	16.9	-	13.6	10.6	-	December data omitted as anomalous
DT13	543955	263588	19.7	18.3	14.9	11.0	10.4	10.1	12.4	11.6	12.4	16.4	20.5	-	14.3	11.2	-	December data omitted as anomalous
DT14	544050	263306	24.0	25.1	19.1	16.2	13.3	16.0	16.0	13.8	18.0	22.9	26.5	-	19.2	15.0	-	December data omitted as anomalous
DT15	544243	261819	16.8	16.9	15.8	9.3	10.2	9.3	11.3	9.7	-	17.6	17.7	-	13.5	10.5	-	September and December data omitted as anomalous
DT17	531300	260226	14.9	12.9	11.3	7.7	8.7	6.8	8.2	8.0	6.5	10.6	18.6	-	10.4	8.1	-	December data omitted as anomalous
DT22	545435	261906	20.4	17.3	15.8	7.9	12.9	11.2	12.0	11.9	14.1	17.2	16.7	-	14.3	11.2	-	December data omitted as anomalous
DT28	545169	261764	19.3	15.8	13.4	-	11.3	10.5	11.0	9.9	11.8	15.5	19.8	-	13.8	10.8	-	April and December data omitted as anomalous
DT-28N	547436	262295	26.1	25.8	20.9	15.4	12.6	14.8	16.2	15.3	13.6	22.0	-	-	18.3	14.3	-	November and December tubes missing
DT29	552961	249251	16.8	6.2	9.5	5.6	6.1	4.9	-	10.6	-	10.4	12.7	-	9.2	7.2	-	July tube missing. September and December data omitted as anomalous
DT-32N	548742	264698	25.5	22.8	18.4	14.1	14.5	14.8	17.0	16.1	16.6	19.9	23.4	-	18.5	14.4	-	December data omitted as anomalous
DT34	532092	259086	-	-	12.5	9.3	9.6	7.5	11.6	7.4	-	15.0	15.8	-	11.1	9.0	-	January, February, September and December data omitted as anomalous
DT37	539851	268174	19.4	-	17.5	-	26.7	12.2	13.3	12.4	9.3	17.1	21.7	-	16.6	13.0	-	February and April tubes missing. December data omitted as anomalous

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.78)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
DT38	539569	266845	13.3	14.4	12.9	-	10.2	10.2	10.2	10.7	10.7	14.7	18.9	-	12.6	9.8	-	April and December data omitted as anomalous
DT40	537459	245587	19.4	16.1	-	10.1	9.8	8.2	9.9	7.5	9.6	13.5	18.5	-	12.3	9.6	-	March tube missing. December data omitted as anomalous
DT41	542443	250755	22.1	20.4	17.1	11.5	12.9	11.2	12.6	13.1	14.7	18.9	22.1	-	16.1	12.5	-	December data omitted as anomalous
DT42	523740	252081	22.1	16.8	15.7	13.3	12.5	11.7	12.7	10.1	15.3	16.4	19.9	-	15.1	11.8	-	December data omitted as anomalous
DT43	538336	244625	21.6	17.8	16.3	11.9	11.2	10.5	13.7	9.6	13.0	17.5	19.7	-	14.8	11.5	-	December data omitted as anomalous
DT44	538268	244767	23.1	21.3	17.6	10.1	16.4	12.2	14.5	13.1	15.6	19.6	19.0	-	16.6	12.9	-	December data omitted as anomalous
DT45	542402	250737	20.7	16.1	17.6	10.4	16.6	14.3	14.5	-	18.7	20.5	22.0	-	17.1	13.4	-	August and December data omitted as anomalous
DT46	546498	252169	-	22.5	18.7	-	11.1	10.2	12.9	11.9	13.8	22.0	21.4	-	16.1	12.5	-	January tube missing. April and December data omitted as anomalous
DT47	545631	253220	21.1	19.7	16.9	8.6	14.5	11.2	13.8	9.0	19.0	20.2	23.2	-	16.1	12.6	-	December data omitted as anomalous
DT48	555862	246598	26.1	32.2	26.9	23.2	26.7	23.6	25.0	-	-	-	30.9	-	26.8	20.6	-	August, September and October tubes missing. December data omitted as anomalous
DT49	555884	246573	32.4	24.3	25.2	19.1	24.6	23.2	22.6	22.3	23.9	26.1	31.2	-	25.0	19.5	-	December data omitted as anomalous
DT50	551476	255933	21.0	15.6	15.0	9.6	12.9	11.9	11.6	10.6	13.4	18.9	21.8	-	14.8	11.5	-	December data omitted as anomalous
DT52	544700	267535	16.0	13.4	14.0	15.6	9.6	7.8	8.9	9.0	10.6	15.7	18.6	-	12.7	9.9	-	December data omitted as anomalous
DT53	549931	265054	16.5	16.6	14.0	7.6	9.8	-	-	10.1	9.9	-	19.6	-	13.0	9.8	-	June, July and October tubes missing. December data omitted as anomalous
DT54	545088	267586	-	-	17.2	10.4	14.7	11.2	14.8	14.6	12.5	20.8	25.3	-	15.7	12.3	-	January tubes missing. February and December data omitted as anomalous
DT55	540195	270063	-	21.5	-	20.7	24.4	25.9	26.8	28.7	24.6	34.1	34.5	-	26.8	20.9	-	January and March tubes missing. December data omitted as anomalous
DT56	540543	266863	-	31.5	29.1	22.9	25.5	25.5	27.0	26.9	28.2	31.2	38.8	-	28.7	22.4	-	January tube missing. December data omitted as anomalous
DT57	548582	260286	27.3	25.7	22.2	17.3	20.5	-	-	20.9	19.7	-	-	-	21.9	18.0	-	June, July, October and November tubes missing.

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.78)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	December data omitted as anomalous
DT58	536196	268795	23.2	18.0	20.4	14.0	17.4	-	16.5	13.8	17.7	23.3	26.0	-	19.0	14.8	-	June tube missing. December data omitted as anomalous
DT59	542429	261497	-	-	-	-	-	-	-	-	10.8	15.2	21.3	-	15.8	9.5	-	January to August tubes missing. December data omitted as anomalous
DT60	531534	263586	9.0	10.7	9.1	7.4	6.3	5.5	6.5	13.2	-	-	-	-	8.5	7.4	-	September to December tubes missing.
DT61	536198	268793	16.2	-	-	10.7	8.7	9.0	9.8	-	-	17.2	19.4	-	13.0	9.8	-	February, March, August and September tubes missing. December data omitted as anomalous

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

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

☐ **Local bias adjustment factor used.**

☒ **National bias adjustment factor used.**

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

☐ **South Cambridgeshire District Council confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System**.

Notes:

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

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

See Appendix C for details on bias adjustment and annualisation.

All December data has been removed as it was abnormally low. Further details found in Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

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

New or Changed Sources Identified Within South Cambridgeshire District Council During 2024

A new residential development has been identified in SCDC in 2024. The Bourn Development is for 3500 new homes. An Air Quality Assessment was carried out for the site in July 2022, and no adverse air quality effects are expected as a result of these works.

Additional Air Quality Works Undertaken by South Cambridgeshire District Council During 2024

SCDC has not completed any additional air quality works in 2024.

QA/QC of Diffusion Tube Monitoring

The supplier of diffusion tubes for SCDC in 2024 was SOCOTEC Didcot. The tubes were prepared using the method 50% TEA in acetone.

SOCOTEC participated in the AIR-PT analysis scheme which ran from May 2022 to June 2024. For all months in this study, SOCOTEC received 100% satisfactory results based upon a z-score of $\leq \pm 2$.

All December results were omitted for 2024 as they were abnormally low. SOCOTEC Didcot has been made aware of the issue.

The monitoring has been completed in adherence with the 2024 Diffusion Tube Monitoring Calendar.

Diffusion Tube Annualisation

Automatic sites selected for annualisation were the closest to SCDC with data capture over 85%. The selected sites met the criteria outlined in LAQM TG.22 and align with those used in previous ASRs for consistency in the results.

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

Site ID	Annualisation Factor Wicken Fen	Annualisation Factor Northampton Spring Park	Annualisation Factor St Osyth	Annualisation Factor Borehamwood Meadow Park	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean
DT34	1.0452	1.0402	1.0222	1.0606	1.0421	11.1	11.6
DT48	0.9737	0.9769	0.9911	0.9974	0.9848	26.8	26.4
DT53	0.9375	0.9580	0.9808	0.9735	0.9624	13.0	12.5
DT57	1.0276	1.0600	1.0486	1.0608	1.0493	21.9	23.0
DT59	0.7685	0.7168	0.8432	0.7455	0.7685	15.8	12.1
DT60	1.1196	1.1391	1.0881	1.1296	1.1191	8.5	9.5
DT61	0.9582	0.9417	0.9866	0.9600	0.9616	13.0	12.5

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2025 ASR have been corrected for bias using an adjustment factor. Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LAQM.TG22 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from NO_x/NO_2 continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

SCDC have applied a national bias adjustment factor of 0.78 to the 2024 monitoring data. The national bias adjustment factor was utilised as none of the diffusion tubes within the district are co-located with an automatic monitor. A summary of bias adjustment factors used by SCDC the past five years is presented in Table C.2 and a picture of the most recent version of the most recent National Diffusion Tube Bias Adjustment Factor Spreadsheet for the relevant laboratory and methodology can be found in Figure C.1 - National Diffusion Tube Bias Adjustment Factor Spreadsheet (v06/25)

Figure C.1 - National Diffusion Tube Bias Adjustment Factor Spreadsheet (v06/25)

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

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

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

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

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

Step 1:	Step 2:	Step 3:	Step 4:								
Select the Laboratory that Analyses Your Tubes from the Drop-Down List	Select a Preparation Method from the Drop-Down List	Select a Year from the Drop-Down List	Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor[3] shown in blue at the foot of the final column.								
If a laboratory is not shown, we have no data for this laboratory.	If a preparation method is not shown, we have no data for this method at this laboratory.	If a year is not shown, we have no data[2]	If you have your own co-location study then see footnote[4]. If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953								
Analysed By[1]	Method To undo your selection, choose (All) from the pop-up list	Year[2] To undo your selection, choose (All)	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m³)	Automatic Monitor Mean Conc. (Cm) (µg/m³)	Bias (B)	Tube Precision[5]	Bias Adjustment Factor (A) (Cm/Dm)	
SOCOTEC Didcot	50% TEA in acetone	2024		Overall Factor[3] (37 studies)				Use		0.78	

Table C.2 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	06/25	0.78
2023	National	03/24	0.77
2022	National	03/23	0.76
2021	National	03/22	0.78
2020	National	03/21	0.77

NO2 Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO_2 concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO_2 fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO_2 concentrations corrected for distance are presented in Table B.1. The diffusion tube data presented in the 2025 ASR did not require any distance correction.

QA/QC of Automatic Monitoring

The analysers utilised by SCDC are chemiluminescence for NO_x. Particulate matter is measured by a combination of BAMs and TEOM-FDMS.

QA/QC of the automatic monitoring is carried out by Ricardo. Audits of the monitoring stations are carried out three times a year by Ricardo. SCDC is also a member of the Calibration Club, operated by Ricardo – AEA.

Servicing of the analysers are carried out twice a year in the appointed Equipment Support Unit (ESU), ACEOM (Air Monitors). The sites are calibrated once a month by the Local Site Operator (LSO). In SCDC, the LSO is a Council Officer. Calibration outputs are forwarded to Ricardo for QA/QC and ratification.

Data for the automatic monitoring is available here: https://scambs-airquality.ricardo-aea.com/

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

The type of PM_{10}/$PM_{2.5}$ monitor(s) utilised within SCDC do not require the application of a correction factor.

Automatic Monitoring Annualisation

Table C.5 – Automatic PM_{10} Annualisation Summary (concentrations presented in $\mu g/m^3$)

Background Site	Annual Data Capture	Annual Mean (A_m)	HARS		NSTOW	
			Period Mean (P_m)	Ratio (A_m/P_m)	Period Mean (P_m)	Ratio (A_m/P_m)
Wicken Fen	99.8	10.8	11.1	0.974	10.8	0.995
Milton Keynes Civic Centre	91.0	9.6	9.7	0.984	9.3	1.031
Borehamwood Meadow Park	95.8	10.7	10.7	1.003	10.3	1.039
St Osyth	99.8	11.3	10.8	1.045	10.7	1.058
Average (R_a)			**1.002**		**1.031**	
Raw Data Annual Mean (M)			**12.2**		**13.5**	
Annualised Annual Mean (M x R_a)			**12.2**		**13.9**	

NO2 Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO_2 concentration at the nearest location relevant for exposure has been estimated using the NO_2 fall-off with distance calculator available on the LAQM Support website. Where appropriate, automatic annual mean NO_2 concentrations corrected for distance are presented in Table A.3. The automatic data presented in the 2025 ASR did not require any distance correction.

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

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

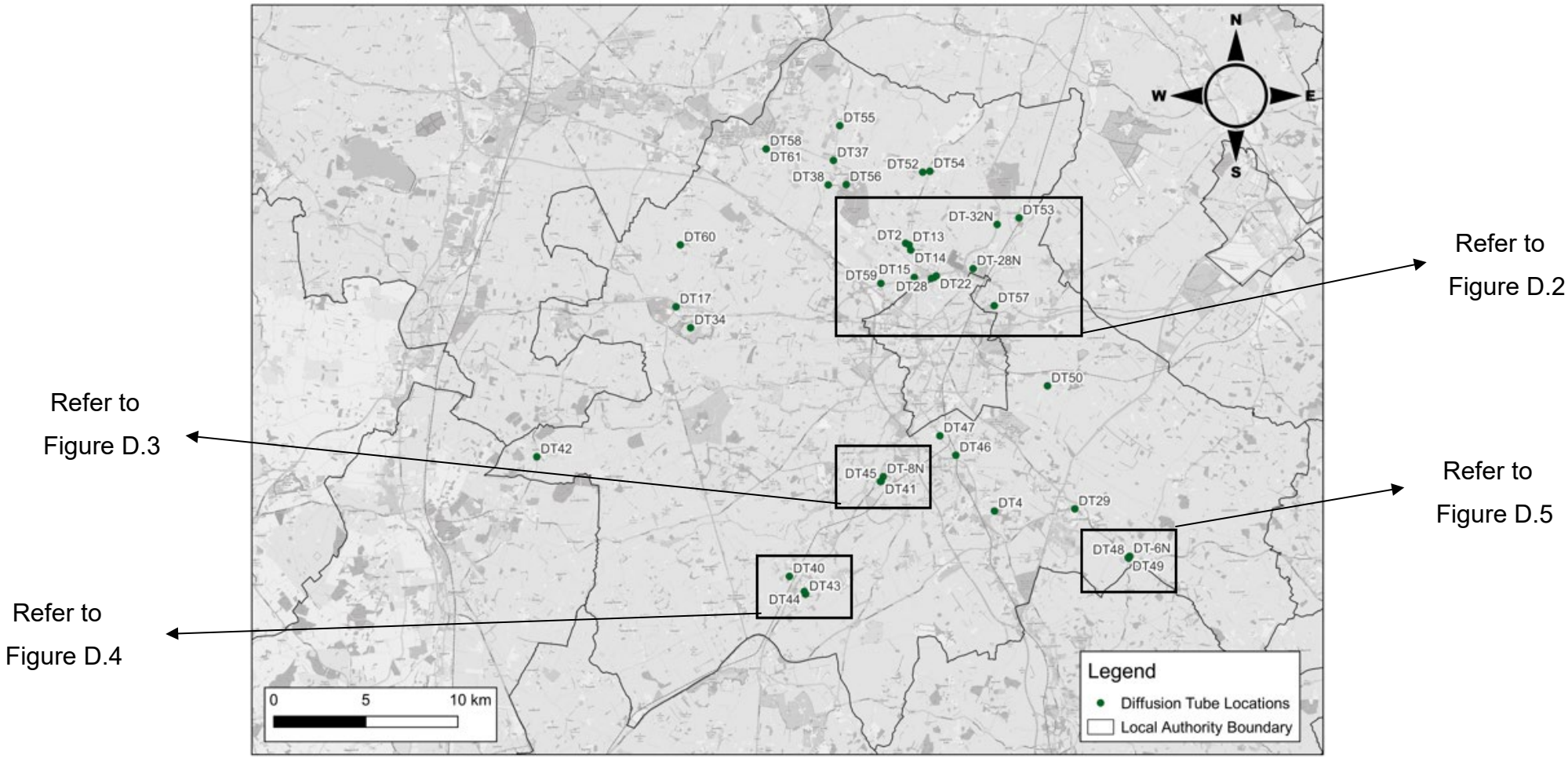


Figure D.2 - Map of Non-Automatic Monitoring Sites

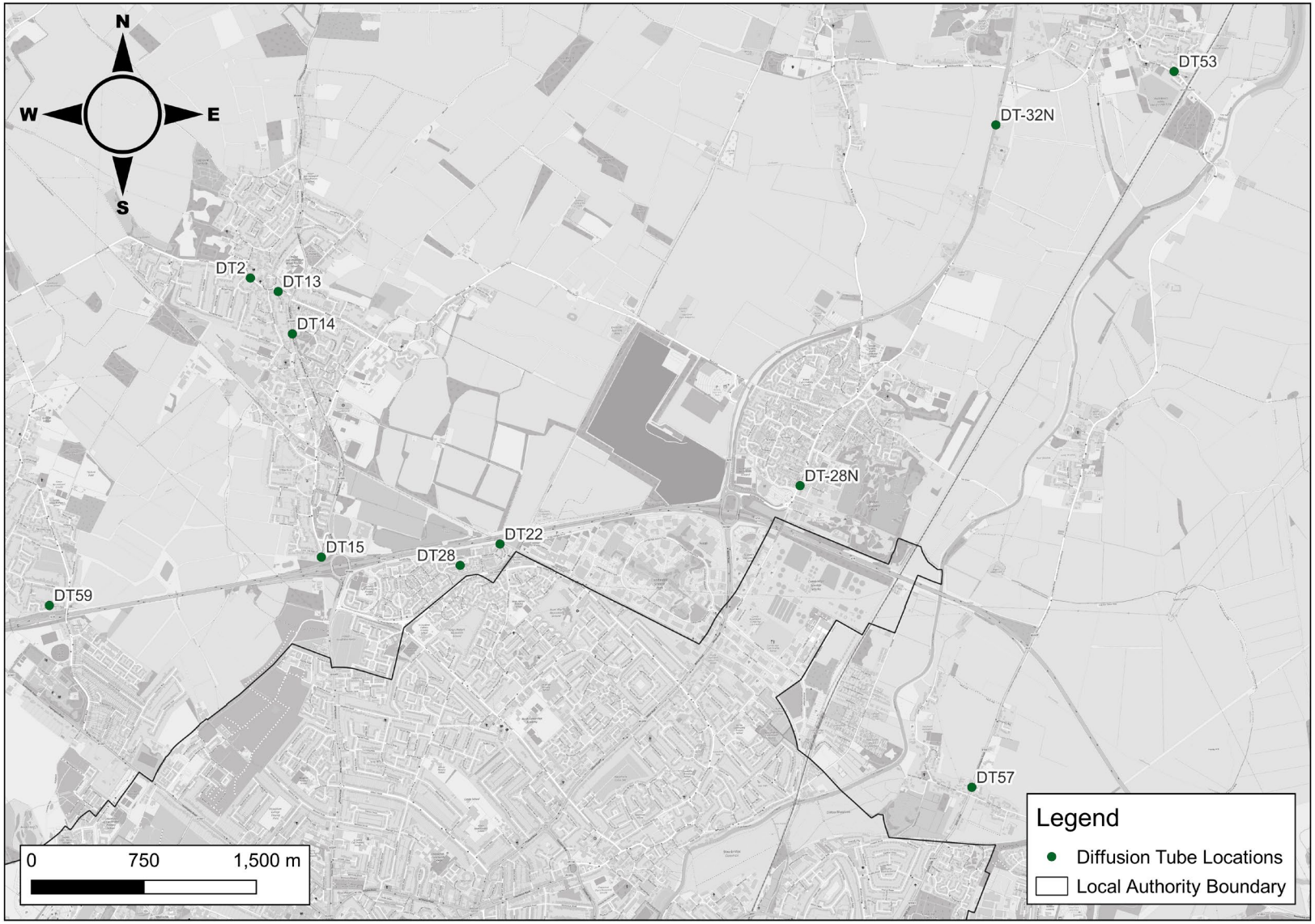


Figure D.3 - Map of Non-Automatic Monitoring Sites

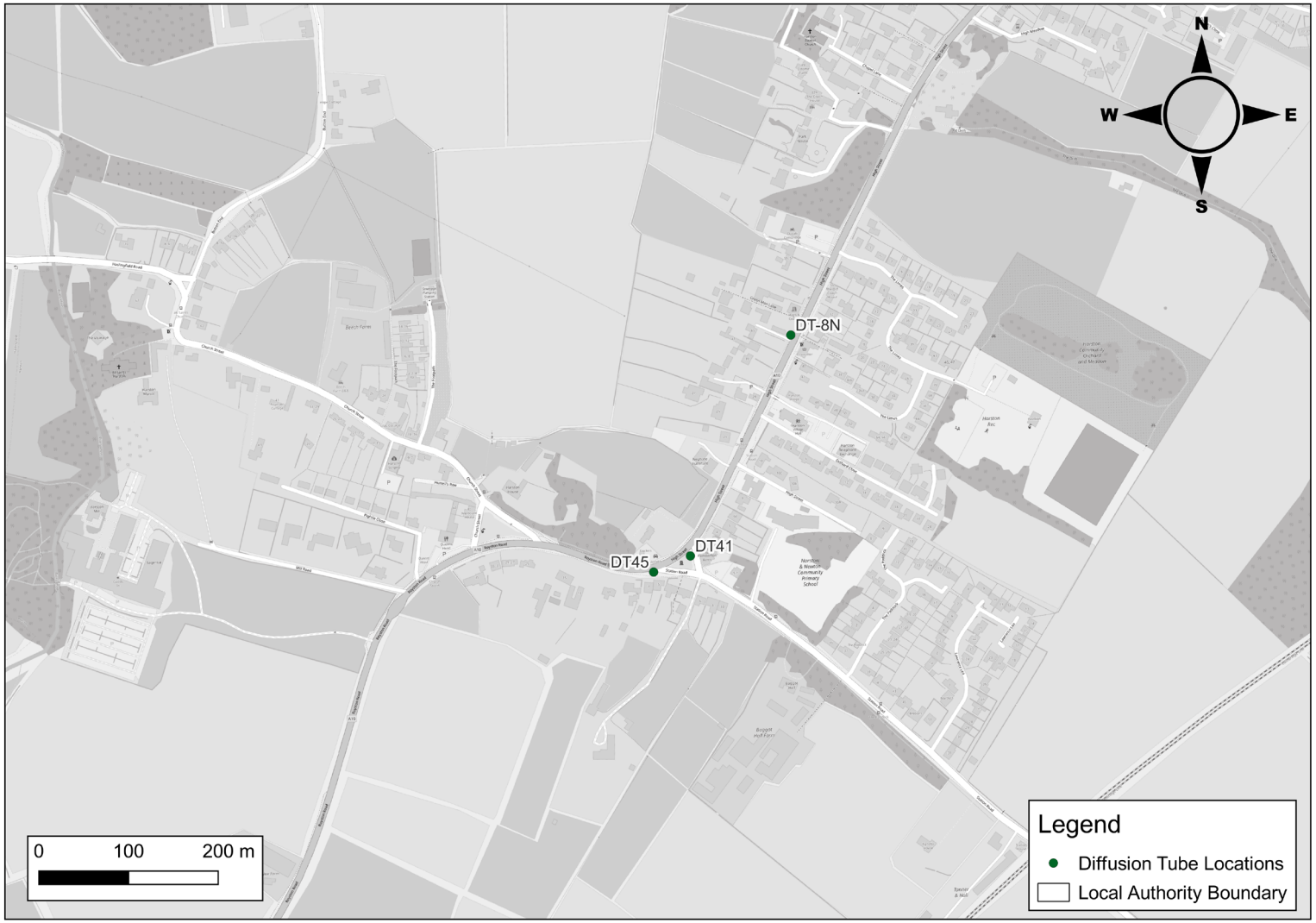


Figure D.4 - Map of Non-Automatic Monitoring Sites

Figure D.5 - Map of Non-Automatic Monitoring Sites

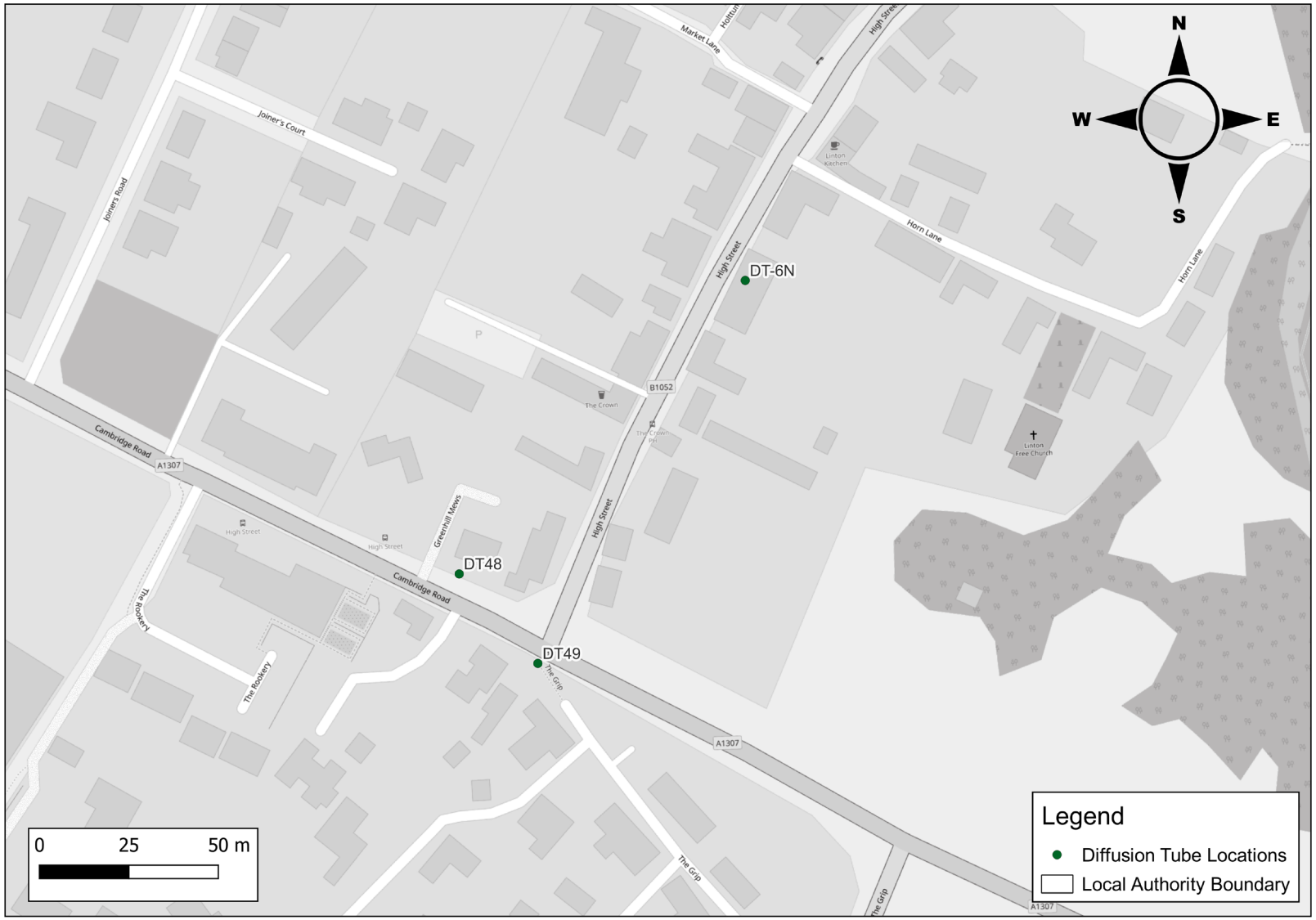


Figure D.6 - Map of Automatic Monitoring Sites

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO_2)	200µg/m^3 not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO_2)	40µg/m^3	Annual mean
Particulate Matter (PM_{10})	50µg/m^3, not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM_{10})	40µg/m^3	Annual mean
Sulphur Dioxide (SO_2)	350µg/m^3, not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO_2)	125µg/m^3, not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO_2)	266µg/m^3, not to be exceeded more than 35 times a year	15-minute mean

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
CCC	Cambridgeshire County Council
CPCA	Cambridgeshire and Peterborough Combined Authority
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by National Highways
GCP	Greater Cambridge Partnership
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SCDC	South Cambridge District Council
SO_2	Sulphur Dioxide
WHO	World Health Organisation

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.
- National Diffusion Tube Bias Adjustment Factor Spreadsheet, v06/25. April 2025. Published by Defra.
- Annual Air Quality Status Report 2024. June 2024. Published by South Cambridgeshire District Council.
- Greater Cambridge Air Quality Strategy, 2024-2029. April 2024. Published by Cambridge City Council & South Cambridgeshire District Council.
- Transport Strategy for Cambridge and South Cambridgeshire. March 2014. Published by Cambridge County Council.
- South Cambridgeshire Local Plan 2018. September 2018. Published by South Cambridgeshire District Council.
- Fraction of mortality attributable to particulate air pollution (new method). 2023. Published by the Department of Health and Social Care.
- Particulate matter (PM_{10}/$PM_{2.5}$). 2025. Published by Defra.
- WHO Air Quality Guidelines. September 2021. Published by WHO.