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
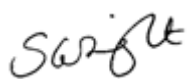
Date: June 2025

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Report Reference Number	ASR 2025
Date	June 2025

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Executive Summary: Air Quality in Our Area

The Environment Act 1995 places a duty on Local Authorities to monitor, assess and take action to improve local air quality under the statutory process of Local Air Quality Management (LAQM). The LAQM system places greater emphasis on action planning to improve air quality, as well as requiring 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. This information is then reported via the completion of an air quality Annual Status Report (ASR). This report relates to data gathered between 1st January and 31st December 2024 and forms Huntingdonshire District Councils 2025 ASR, providing a review of air quality in the district during 2024.

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 & 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.

Air Quality in Huntingdonshire

Following a sharp reduction in pollution levels from 2019 – 2020, results of monitoring indicated a slight rise in 2021 and 2022 as traffic levels stabilised following Covid restrictions and the A14 relocation works. Pollution levels fell at every monitoring point in 2023, and this has been the case again in 2024 where monitoring indicates pollution levels have decreased at most sites with the exception of 2, where there was a slight increase and 3 sites where the levels remained the same.

The main air quality concerns within Huntingdonshire continue to be Nitrogen Dioxide (NO_2) from vehicle emissions, originating from the A14, A1 and local traffic within the market towns, however the most recent results show that in 2024 pollution levels were lower at the majority of monitoring locations, and the data collected demonstrates that there were no breaches of any of the national objectives in 2024 at any of the measurement locations within Huntingdonshire.

Further to the revocation of three of our four Air Quality Management Areas (AQMA's) in 2024 due to continued compliance with the national objectives, we have been investigating the potential for revoking our final remaining AQMA, AQMA 1 in Huntingdon.   This can be viewed on our website at: Air Quality - Huntingdonshire.gov.uk and on the Defra website at: Local Authority Details - Defra, UK.

Previous discussions with the LAQM helpdesk have confirmed the 2022 data (obtained during the completion of the A14 relocation works which finished in May 2022) is suitable for use in assessing the potential revocation of AQMA 1. LAQM Technical Guidance 2022 advises the revocation of an AQMA should be considered following three consecutive years of compliance with the relevant objective as well as consideration of other aspects such as national trends in emissions etc. Huntingdonshire District Council applied for and gained an extension request from Defra to postpone the submission of an Air Quality Action Plan (AQAP) which is required where local authorities have an AQMA. As we now have data for 2022, 2023 and 2024 demonstrating good compliance with the national objectives within the Huntingdon AQMA, and it is considered that there are unlikely to be any further exceedances in the area, it is proposed the AQMA is revoked. Compliance is likely due to the relocation of the A14 trunk road away from Huntingdon, as well as changes in travel behaviour post Covid and an increase in less polluting vehicles. Proposed revocation will be taken to committee and if agreed by members the final AQMA will be revoked, and an Air Quality Strategy will be developed in line with government guidance.

Diffusion Tubes (non-continuous monitors for Nitrogen Dioxide (NO$_2$))

With the exception of a slight increase in 2021 and 2022, results from previous years have been in line with national trends and shown a predominantly year on year reduction in Nitrogen Dioxide (NO$_2$). The results for 2024 are similar to those of 2023 with a reduction in pollution levels measured at the majority of monitoring sites. Pollution levels remained the same at 3 locations: Brampton 5 at 9.2µg/m^3, Huntingdon 1 at 9.1µg/m^3 and Alwalton at 10.9µg/m^3. All of which are well below the national objective of 40µg/m^3. At two locations there was a slight increase in pollution levels, Buckden 1 increased from 14.6µg/m^3 to 15.7µg/m^3 and Stibbington increased from 11.6µg/m^3 to 13.7µg/m^3. Both of these sites were still below the level measured in 2022 and are both well below the objective level. These localised increases may be due to roadworks taking place on the A1 near the Stibbington site and Buckden 1 monitoring point is located on a property which had renovation works taking place for a period of time and this may have contributed to the increase at that location.

As highlighted, the majority of sites indicated a reduction in NO$_2$ levels. The largest decrease was at Yaxley with a reduction of 2.6µg/m^3 from 17.4µg/m^3 in 2023 to 14.8µg/m^3 in 2024, a reduction of 18%. The site with the largest percentage reduction was Godmanchester with a 27% reduction from 10.9µg/m^3 in 2023 to 8.6µg/m^3 in 2024.

The highest concentration measured by diffusion tube within the district during 2024 has changed location this year and is now at Needingworth Road in St Ives with a level of 22.5µg/m^3 compared to Pathfinder House (PFH) with the mean result of 21.8µg/m^3 for the triplicate tubes at that location. This compares to figures of 23.4µg/m^3 in 2023 for Needingworth Road and 24µg/m^3 in 2023 for PFH. Despite being the highest concentrations both sites remain well within the objective of 40µg/m^3.

Huntingdonshire District Council has considered it necessary to reject diffusion tube data for the majority of sites for November 2024 as the lab results were extremely low and indicated an error in the analysis. The lab was contacted who acknowledged a fault and are investigating. Fortunately, there was sufficient coverage for the rest of the year so annualisation was not required at any site. More information can be found in Appendix C.

Government guidance LAQM Technical Guidance 2022 (TG22) requires a bias adjustment factor to be utilised with diffusion tube monitoring concentration data due to the inherent uncertainty associated with this method. Huntingdonshire District Council has produced and utilised a localised bias adjustment figure of 0.79. This is similar to the national bias figure of 0.78 gained from the National Diffusion Tube Bias Adjustment Factor

Spreadsheet (04/25). The difference in use of the local compared to the national adjustment factor is minor and being slightly higher the local figure gives the higher (poorer) result. For example, at Needingworth Road, St Ives, which has the highest result in the district, the concentration is 22.5µg/m^3 using the local bias adjustment figure, compared to 22.2µg/m^3 using the national. The localised figure was utilised due to the data capture, the overall good precision and high quality chemiluminescence results. The methodology for gaining the bias adjustment figure can be found in Appendix C.

The overall trend this year has been a reduction in pollution levels and the data demonstrates that in 2024 all sites met the NO$_2$ objective of 40µg/m^3 and no results were within 10%. This includes at all sites within the final remaining AQMA in Huntingdon, indicating good ongoing compliance. The continuing low trend is likely due to the relocation of the A14, improvements in vehicle emission standards and a change in travel behaviour.

Continuous monitors (Analysers for Particulate Matter (PM) and NO$_2$)

PM$_{10}$, PM$_{2.5}$ and NO$_2$ are continuously monitored at the Air Quality Monitoring Station (AQMS) located near Pathfinder House. Results indicate that there were no exceedances of any of the air quality objectives in 2024 at this location.

Data capture for both the NO$_2$ analyser and the FIDAS (Particulate Matter (PM) analyser) was excellent at 99.66% and 99.89% respectively, and therefore there is no requirement to annualise the data in line with TG22. Further details regarding this can be found in Section 3.1 and Appendix C.

The results show the annual mean PM$_{10}$ figure decreased from 13.54µg/m^3 in 2023 to 12µg/m^3 in 2024. This remains well within the objective level of 40µg/m^3. The results also indicate there was 1 breach of the 24-hour objective (50µg/m^3) with a single daily mean reaching 53µg/m^3 during 2024, compared to 0 in 2023. It should however be noted that the limit is 50µg/m^3, <u>not to be exceeded more than 35 times a year</u>, so the result remains compliant with the objectives.

After falling from 8.3µg/m^3 in 2022 to 6.99µg/m^3 in 2023, PM$_{2.5}$ has increased very slightly to 7µg/m^3 in 2024.

The NO$_2$ analyser measured an annual mean of 23µg/m^3 in 2024, down from 24.98µg/m^3 measured in 2023 and there were no 1-hour means above 200µg/m^3.

Residential Development:

Huntingdonshire is a growing district and the number of new properties continues to increase significantly, with many large-scale long-term developments, both under construction, as well as proposed within the planning process. Extensive development is still taking place around St Neots and Alconbury Weald and other large sites include locations at St Ives, Godmanchester, Buckden and Huntingdon itself. Huntingdonshire District Council's Local Plan outlines the requirements for an air quality assessment in Policy LP 36, and therefore the majority of larger scale and/or potentially polluting proposals are accompanied by an Air Quality Impact Assessment to assess the impact of the proposed development (including during construction) and any mitigation required. We encourage developers to consider the potential impacts on air quality and minimise them as far as possible, even if the objectives are not likely to be breached.

Industrial Development:

Last year's ASR discussed an appeal following Cambridgeshire County Council's refusal of permission for the construction of a dry anaerobic digestion facility, pellet fertiliser facility and healthcare waste energy recovery facility at a current waste composting site. Following the Public Inquiry the Planning Inspectors report was sent to the Secretary of State who issued a decision at the end of July 2024 agreeing with the planning inspector's recommendation of allowing the appeal and granting planning permission.

The application to the County Council for the construction and operation of a Thermal Treatment Facility for the generation of electricity from non-hazardous, residual waste (post-recycling), including associated plant and infrastructure at another location within the Huntingdonshire district is still ongoing and has yet to be determined. This will be discussed further in next year's ASR.

The Small Waste Incineration Plant (SWIP) near Colne continues to experience technical issues and the operator has decided to discontinue the electricity generation element and is also considering the viability of continuing as a SWIP and investigating ways to fall outside the Schedule 13 regime and potentially move to a Part B Permit. Officers are working with the site and the Environment Agency's Local Authority Unit to gain the most appropriate outcome.

During 2024 one of our operators surrendered 7 of their mobile crusher Environmental Permits as they intend to keep the plant at designated sites. One of our dry cleaners also ceased trading. There were no new Permits issued in 2024.

Partnership working:

Huntingdonshire District Council remain a member of the countywide Cambridgeshire and Peterborough Pollution Group (CPPG) which aims to meet regularly and is attended by local authorities, the County Public Health team and the Environment Agency to share information and best practise measures, as well as identify and work on specific projects. Unfortunately, this did not take place during 2024 due to the organising authority having other work commitments and it is hoped this will be resurrected in 2025 when the chairmanship changes.

Huntingdonshire District Council continue to apply for funding from the County Council's Local Transport air quality monitoring budget to assist with monitoring provision around the district and are grateful to the County Council for their continued support.

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.

Locally:

Following the actions discussed in last year's ASR, Huntingdonshire District Council continues to take measures to reduce energy consumption and emissions, which will help to improve air quality. These include the following:

1. The appointment of a new Building Management System (BMS) contractor has allowed our two main buildings to be linked together and enabled easier access to both sites for temperature and equipment management. In addition, relevant One Leisure employees have access to their BMS systems to investigate saving energy where possible.

2. Following funding gained for solar panels and Triple Glazed windows – One Leisure St Ives had a solar canopy installed in the car park. This solar canopy was a 257kW-peak system which the site will use around 90% with the rest being sold back to the grid. This was commissioned mid-April 2025.

3. In October 2024 the Facilities team were given capital investment money to install roof mounted solar at One Leisure St Ives (Outdoor), St Neots, Huntingdon Dryside and Ramsey. These are due to be installed and commissioned in 2025 and will be discussed further in next year's ASR.

4. As of 1st October 2024, we have procured through the EPSO framework a 100% renewable electricity tariff with Total Energies for our Facilities Portfolio. By doing this we have reduced our carbon production to 0 for electricity.

5. A Building Energy Strategy contractor has been appointed to produce a building energy strategy which is due to be published by end of July 2025.

6. The hydrotreated vegetable oil (HVO) pilot project discussed in last year's ASR was successful and Cabinet approved the use of HVO for all standard diesel vehicles in the Council, which will start to be utilised in 2025-2026. Once completely up and running, this will reduce our carbon emissions by 82%, an estimated reduction of 1,100 tonnes of CO_2.

7. All staff members now have access to a 30-minute e-learning course concerning Climate and Environment as part of HDC's staff learning and development offering.

8. Community engagement continued with HDC delivering its 2nd Annual Climate Conversation held in November 2024, bringing together stakeholders and residents to discuss and inspire climate action.

These actions are all helping the council to strive towards its 'carbon net zero by 2040' goal and so far there has been a total emissions reduction of 1,032 tCO2e since 2019. This represents a 34% decrease in the Council's total emissions.

Monitoring:

The monitoring of air quality within the district is considered an important aspect and Huntingdonshire District Council continues to re-evaluate the monitoring provision within the area on an on-going basis. This involves the consideration of low-cost monitors as well as the diffusion tube network, which was reassessed towards the end of 2024 with changes to the number and several locations taking place from the beginning of the 2025 financial year. These will be discussed in next year's ASR.

Planning:

As in previous years, the Environmental Protection Team continue to provide advice to the Planning Team regarding proposed developments to minimise air pollution impacts, even if there is no risk that air quality objectives will be breached. This approach is supported by both national and local planning policies, promoting air quality improvements and minimisation of impacts.   Therefore, even if the effect is judged to be insignificant, consideration of the application of good design and good practice measures is advised, including the following:

• promoting active travel and ensuring good cycling and walking infrastructure (preferably away from roads) to reduce reliance on vehicle use,

• the provision of electric vehicle rapid charge points/infrastructure,

• access to public transport,

• good property insulation,

• low emission design.

As mentioned above, Policy LP 36 of the Huntingdonshire District Council Local Plan sets out the requirements for an air quality impact assessment, and in line with this most larger scale, or potentially polluting proposals are accompanied by an air quality impact report.

Construction Environmental Management Plans (CEMP's) continue to be a requirement for certain developments in order to control and minimise the impact of pollution, especially particulate matter, during construction activities.

Clean Air Day:

During 2024 Huntingdonshire District Council supported the National Clean Air Night public awareness campaign on 24th January 2024 and the Clean Air Day campaign on 20th June 2024.

Huntingdonshire District Council provided information and advice to the public on our website and via social media throughout the campaigns:

Website:

Twitter/X:

Clean Air Night: *Clean Air Day:*

A14 upgrade:

The A14 relocation project has not only improved traffic flows and reduced travel disruption through Huntingdon, but the results also indicate it has had a beneficial impact on NO_2 and particulate matter pollution levels within the Huntingdon AQMA.

Whilst the new section of road (green line below) opened at the end of 2019, the associated works to the A1307 (pink/red road through Huntingdon), including removing the viaduct, were completed in May 2022. It is now considered sufficient evidence has been gained to demonstrate good, continued compliance with the national objectives within the AQMA and that it is unlikely there will be a future breach of the objectives. It is therefore our intention to put forward a proposal for revocation of this AQMA.

A428 upgrade:

Construction on a new 10-mile dual carriageway (shown in orange on the plan below) and various junction improvements commenced during 2023 on the A428 between the Black Cat roundabout and Caxton Gibbet roundabout. This directly affects traffic flows within and south of St Neots.

A Development Consent Order (DCO) covers the work and is subject to a number of conditions, including the requirement for management plans to minimise and control dust and air pollution during construction. Regular liaison meetings are being held between the construction team and all local authorities involved, including Huntingdonshire District Council, where matters such as pollution control are discussed to ensure adequate mitigation measures are being utilised.

The road is due to open in 2027. Further information on the project can be seen at: <u>A428 Black Cat to Caxton Gibbet improvements - National Highways</u>

East West Rail:

East West Rail (EWR) is a nationally significant railway project which aims to deliver much-needed transport connections for communities between Oxford and Cambridge. The main sections to impact on Huntingdonshire are highlighted below. This project is still in the planning phase and the final route is yet to be determined. EWR may impact Huntingdonshire during the construction phase and we are working with the applicants to ensure all mitigation measures are taken to control pollution during construction should the proposals be approved. If implemented the rail route will provide an alternative transport provision to road.
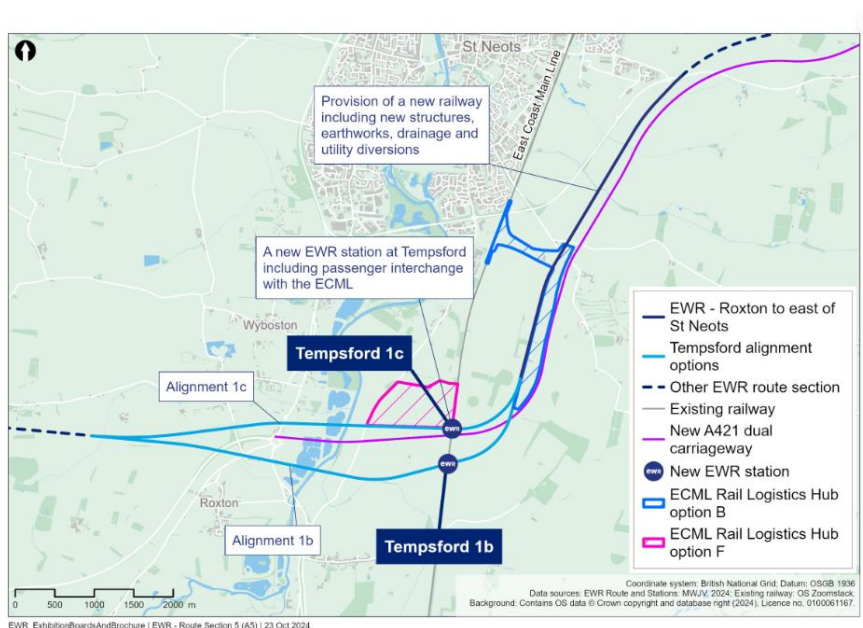
More information can be found at the EWR website: East West Rail | Home

Conclusions and Priorities

Overall in 2024 there has been a reduction in NO_2 and PM_{10}, and a slight increase in $PM_{2.5}$ compared to 2023. At the majority of monitoring locations NO_2 has reduced and the location with the highest concentration measured by diffusion tube is now at Needingworth Road in St Ives, which at 22.5µg/m³ is marginally higher than the mean triplicate value at Pathfinder House, at 21.8µg/m³, however both are well within the national objective of 40µg/m³. With the exception of St Neots 5, Buckden 1, Offord Clunny 1 and St Ives 5 all monitoring sites are actually below levels measured in 2020 during the Covid pandemic, as can be seen in the graphs within Appendix A. All sites demonstrate good compliance with the national objectives.

The AQMS at PFH measured an annual mean of 23µg/m³ for NO_2, a reduction of almost 2µg/m³ when compared to 2023's annual mean and there were no 1-hour means above 200µg/m³. The annual mean PM_{10} figure decreased by 1.54µg/m³ to 12µg/m³ in 2024 compared to 2023, remaining well within the objective level of 40µg/m³ and whilst there was 1 breach of the 24-hour objective (50µg/m³) this is not of concern as the objectives allow up to 35 breaches per year. Following a reduction from 8.3µg/m³ in 2022 to 6.99µg/m³ in 2023, $PM_{2.5}$ has increased very slightly to 7µg/m³ in 2024.

Monitoring indicates there have been no exceedances of the national air quality objectives at any of the monitoring points within the Huntingdonshire district, including within the Huntingdon AQMA which shows good ongoing compliance. This can now be demonstrated over a sufficient timescale to give confidence that the air quality meets the objectives and reasonable certainty that any future exceedances are unlikely. This therefore meets the criteria within TG22 for revocation and it is proposed to take this to committee later in 2025.

An Air Quality Action Plan (AQAP) is required where a local authority have an AQMA and Huntingdonshire District Council currently have an approved extension from Defra to defer submission of a new AQAP to allow a robust assessment into the requirement for the AQMA. It is now considered sufficient evidence is available to comply with TG22 and take the proposed revocation through to committee. Once approved an Air Quality Strategy (AQS) will be produced for the district.

Whilst there is a significant amount of development occurring in Huntingdonshire it is not considered likely that this will lead to a breach of the objectives.

The main priorities for 2025 and beyond for Huntingdonshire District Council in relation to air quality are to:

- Complete a review into the status of the Huntingdon AQMA to show monitoring compliance, take this to committee for consideration and take appropriate action following their decision.

- Once the future of the final AQMA is known, completion of a new AQS.

- Improve internal partnership working, including with the Operations and Climate teams, to ensure a holistic approach to minimising emissions from the council itself.

- Continue to maintain partnership working with Huntingdonshire District Council planning department and improve partnership working with the County Council Highways team and other relevant stakeholders, for example with considering the provision of low-cost air quality sensors for public education and awareness; and

- Continue to ensure construction impacts are considered and mitigation provided for appropriate development proposals.

These are discussed further in Section 2.2 below.

Challenges:

With the removal and relocation of various diffusion tubes in 2025 the reporting requirement will be more challenging within next year's ASR, in addition there will not be as much historical data for the new monitoring points.

A continued challenge is to ensure sufficient resources are available for the air quality function but the main ongoing challenge, as highlighted last year, remains to balance economic growth within Huntingdonshire, whilst ensuring compliance with the air quality objectives and promoting and encouraging best practice to minimise pollution where possible, especially where this is not necessarily a legal requirement.

How to get Involved

As members of the public and local action groups increasingly recognise the impacts of poor air quality, Huntingdonshire District Council continues to receive requests and provides information regarding air quality within the district. As a local authority Huntingdonshire District Council also takes part in the promotion of Clean Air Day and Clean Air Night, in order to highlight air quality issues and provide information and advice. There are various links below with advice and guidance for improving air quality.

Members of the public can help to improve local air quality by reducing their emissions. Improving home insulation (which will also help to reduce heating bills), reducing the number of car journeys undertaken, car sharing, using public transport, walking, or cycling wherever possible (active travel), switching off car engines when stationary, purchasing energy efficient goods, improving energy efficiency at home, and choosing to purchase a low emission car are all examples of actions that can help to reduce emissions.

For more information on public transport for Cambridgeshire please visit the County Council website at: Public transport, Park and Ride and Guided Busway - Cambridgeshire County Council.

An increasing concern for air quality is the popularity of wood burning stoves and open fires used for decorative purposes rather than a primary source of heat, as these contribute to air pollution and alternatives should be used where possible. There are a number of steps members of the public who use these can take to reduce environmental and health impacts. More information can be found on our website at Wood Burning Stoves - Huntingdonshire.gov.uk, where we also signpost to Defra's advice on this aspect.

Further information on energy efficiency is provided on our website under 'Sustainability and greener living' Sustainability & Greener Living - Huntingdonshire.gov.uk. The energy savings trust can also provide advice at Energy Saving Trust.

The Community Chest Grant remains available from Huntingdonshire District Council to community groups and organisations whose proposals meet four key priorities, one of which is lowering carbon emissions. More information can be found on our website here: Grants - Huntingdonshire.gov.uk .

Finally, as discussed earlier, Huntingdonshire District Council support National Clean Air Day and National Clean Air Night who provide another valuable source of information regarding air quality advice and how to minimise exposure on their Clean Air Day | Action for Clean Air website.

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1 Local Air Quality Management

This report provides an overview of air quality in Huntingdonshire 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 Huntingdonshire 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 Huntingdonshire District Council can be found in Table 2.1. The table presents a description of the AQMA that is currently designated within Huntingdonshire. Appendix D: Map(s) of Monitoring Locations and AQMAs provides a map of the AQMA and the air quality monitoring locations in relation to it. The air quality objective pertinent to the current AQMA designation is as follows:

- NO_2 annual mean

We propose to revoke the Huntingdon AQMA (see section 3.2.1).

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
Huntingdonshire District Council Air Quality Management Area Order No. 1 (Huntingdon: Nitrogen Dioxide)	1st December 2005 - amended 26th October 2007	NO_2 Annual Mean	An area encompassing approximately 2831 domestic properties affected by the A14, A141, B1044, B1514 and Huntingdon Inner Ring Road.	YES	$50.2 ug/m^3$	None $(23 ug/m^3)$	5*	Cambridgeshire Joint Air Quality Action Plan (2009)	www.huntingdonshire.gov.uk/media/3423/2009-joint-air-quality-action-plan.pdf

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

☒ **Huntingdonshire District Council confirm that all current AQAPs have been submitted to Defra.**

* *Monitoring in 2020/2021 was deemed to have a high level of uncertainty due to Covid restrictions and road closures associated with the relocation of the A14. Huntingdonshire District Council successfully applied to defer submitting a new AQAP until an appropriate assessment could be made of the pollution levels to determine if the AQMA was still required. Following the assessment of 2022, 2023 and 2024's data, revocation of this AQMA is proposed and therefore an Air Quality Strategy will be completed instead, as per the guidance.*

2.2 Progress and Impact of Measures to address Air Quality in Huntingdonshire

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

DEFRA conclusions	Huntingdonshire District Council response
1. The Council have put together a good quality ASR submission and should be commended for their efforts.	Comment welcomed and noted.
2. The Council have correctly applied QA/QC protocols for annualisation and have selected an appropriate bias adjustment factor using a local factor. 99% of data capture by the continuous analyser is great to see.	Comment noted and we have managed to achieve in excess of 99% again this year.
3. It is positive to see that HDC has revoked 3 AQMAs that are no longer required, in line with LAQM Technical Guidance 2022. Please note, this needs to be updated on the UK-air portal.	Noted and completed.
4. The ASR has been signed off by the Director of Public Health. This is not a requirement but is encouraging to see.	Noted. Huntingdonshire District Council intend to continue this consultation process.
5. The SOCOTEC laboratory used for the analysis of the diffusion tubes have two sites around the U.K (Glasglow and Didcot). When referring to a laboratory in the QA/QC section of the report, please ensure that the name of the location of the laboratory is included in the text.	Comment noted and completed.
6. The Council have provided responses to last year's appraisal comments, this is appreciated and encouraged for future ASRs.	Comment noted and completed.

Huntingdonshire 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.

As stated in previous ASR's, it should be noted that these measures originate from the Cambridgeshire Air Quality Action Plan (2009) and hence have remained the same for several years. Following the revocation in 2023 of the St Neots, Brampton and Fenstanton AQMA's a deferral request was submitted to, and agreed by, Defra to delay the requirement to submit a new AQAP as it was considered highly likely that following the collection and assessment of the monitoring data for 2024, sufficient evidence would be available to put forward a robust proposal to revoke the Huntingdon AQMA. This is now the case and we are proposing to revoke the Huntingdon AQMA and therefore the submission of an AQAP is no longer a requirement. Instead, the most appropriate approach is the development of an Air Quality Strategy (AQS).

Six measures are included within Table 2.2, with the type of measure and the progress Huntingdonshire 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. These measures will be updated in the next ASR to reflect the new Air Quality Strategy when completed.

More detail on these measures can be found in the Action Plan at Joint Air Quality Action Plan 2009 (huntingdonshire.gov.uk).

Key completed measures are:

Measurement 1: The A14 upgrade and associated works were fully completed in May 2022. The majority of traffic has been relocated onto the new A14 at a greater distance from Huntingdon. In line with the LAQM Helpdesk's advice and Technical Guidance 2022 (TG22) the Huntingdon AQMA has now been re-evaluated following the collection and assessment of 2024's monitoring data and revocation is proposed due to continued compliance.

Measurement 2: Implementation of air quality policies in the local plan is currently on going. The Local Plan for Huntingdonshire to the year 2036 was adopted in 2019 and includes a policy on air quality with a requirement for a low emissions strategy in certain circumstances. The plan also provides advice on the provision of electric vehicles, and it is hoped this will encourage the use of electrically powered vehicles, in line with National Planning Policy.

In an attempt to ensure air quality is fully considered, officers continue to advise the Local Planning Authority, developers, and air quality consultants about current public health advice to minimise the health impacts of air quality even if there is no risk that air quality standards will be breached. Therefore, even if the effect is judged to be insignificant, consideration should be given to the application of good design and good practice measures, including aspects such as electric vehicle rapid charge points, insulation, and active travel provision.

Measurement 3: Smart traffic lights at St Neots have been installed and are operational.

Measurement 4: Inclusion of Huntingdonshire in the Quality Bus Partnership (QBP). Cambridgeshire County Council has not extended the QBP to outside Cambridge City, and currently has no plan to do so, therefore no further action will be taken regarding this measure at this time. This will be reassessed in the AQS.

Measurement 5: The guided bus route is complete and operational.

Measurement 6: Development of an effective freight partnership. Following the relocation of the A14 away from the main residential areas it is not expected that freight will cause a significant issue within Huntingdonshire, therefore it is intended that no further action will be taken regarding this measure at this time. This will be reassessed in the AQS.

With the exception of measure 2, which is ongoing, none of the other formal six measures from within the AQAP remain outstanding as currently measures 4 and 6 are not intended to be continued and 1, 3 and 5 have been completed.

Huntingdonshire District Council worked to implement these measures in partnership with the following stakeholders during 2024:

- National Highways
- A428 Project Team
- EWR project Team
- Neighbouring Local Authorities
- District and County Planning and Development Teams
- Cambridgeshire County Council Public Health Team

Huntingdonshire District Council's priorities for the coming year are:

- The main priority is to progress the proposed revocation of the Huntingdon AQMA (AQMA 1). Air quality standards and objectives have been achieved for a number of years and this is likely to continue. Sufficient evidence has now been gained to meet the requirements of TG22 and enable a robust assessment which demonstrates strong compliance with the national objectives to be put before committee. Following management approval, it is envisaged committee approval will be sought later this year (2025), prior to the revocation order being made.

- Development of an Air Quality Strategy.

- Continue to maintain partnership working with Planning and encourage more involvement with the councils Climate team, as well as promoting opportunities for collaboration with Highways, the County Public Health team and other interested parties.

- Continue to ensure construction impacts are considered and adequate mitigation utilised for appropriate development proposals (including vehicle idling).

- Work in partnership with the County Council, Combined Authority, and other relevant stakeholders to review the potential to introduce air quality sensors for public education and awareness.

- Consider the implications on Huntingdonshire District Council of the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 and the Defra Environmental Improvement Plan 2023 and how any requirements will be achieved.

- Continue to utilise funding opportunities to support the air quality monitoring service.

- Continue to regulate industrial processes falling under the Environmental Permitting Regime and provide advice and guidance on additional mitigation measures to minimise pollution as far as possible; and

- Continue to consider what further measures the Council can take to improve its own emissions and work towards improvements in order to achieve the aspiration of a net zero Huntingdonshire by 2040.

The principal challenges and barriers to implementation that Huntingdonshire District Council anticipates facing continue to be the provision of resources to prioritise this work, availability of partners to collaborate and difficulties in assessing the suitability and data reliability of low-cost sensors should future investment become available.

The measures stated above and in Table 2.2 have achieved compliance in the Huntingdon AQMA, as well as continued compliance around the district and therefore revocation of the final AQMA is proposed.

Table 2.2 – Progress on Measures to Improve Air Quality

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
1	Re-routing of A14 away from settlements	Traffic Management	Strategic highway improvements, Re-prioritising road space away from cars, including Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	2009	2020	Highways England	Highways England	Funded		Completed	AQMA 1 should meet requirements	Monitoring indicates a reduction	**Completed** 30th May 2022.	Lengthy Timescale but expected to improve air quality in the Huntingdon AQMA and the now revoked AQMA 3 (Brampton) and 4 (Hemingford to Fenstanton).
2	Implementation of air quality policies in the local plan.	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2009	Ongoing	Huntingdonshire District Council	Huntingdonshire District Council	Funded		Implementation	All	N/A	Included within the HDC Local Plan to 2036 Implementation **On-going**	Highlighting AQ aspects and measures for reduction is ongoing.
3	Change to traffic-light system in St Neots High Street as specified in the St Neots Markets Town Strategy	Traffic Management	Strategic highway improvements, Re-prioritising road space away from cars, including Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	2009	Completed	Cambridgeshire County Council	Cambridgeshire County Council	Funded		Completed	Reduction in the now revoked AQMA 2 St Neots	AQ monitoring indicates a reduction	**Completed**	Works completed in 2013. Modelling undertaken in 2017 demonstrates AQ limits are being met and HDC are in the process of revoking the AQMA. See Section 2.2
4	Inclusion of Huntingdonshire in the Quality Bus Partnership	Alternatives to private vehicle use	Other	2009	None	Cambridgeshire County Council	Cambridgeshire County Council	Not Funded		Aborted	All	N/A	None **Suspended**	At present CCC do not consider that it is feasible to run the QBP outside of the city of Cambridge. This is something we will continue to consider.
5	Completion and opening of Cambridgeshire Guided Busway	Transport Planning and Infrastructure	Bus route improvements	2009	Completed	Cambridgeshire County Council	Cambridgeshire County Council	Funded		Completed	All	Unknown	**Completed**	The guided busway was opened in August 2011 from Cambridge Huntingdon and extended to Peterborough in July 2012.

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
6	Development of an effective freight partnership	Freight and Delivery Management	Other	2009	Unknown	Not currently progressing	Not currently progressing	Not Funded		Aborted	All	N/A	None **Suspended**	Now the A14 improvement has been completed and Highways England have applied for improvements on the A428, it is unknown if an effective freight partnership would have any significant effect. This will be re-evaluated once changes have been monitored.

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

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy[1], local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter (PM$_{2.5}$)). Particulate Matter (PM)$_{2.5}$ is not a single chemical, but any substance in the air which is not a gas and is a suspension of particulate matter with an aerodynamic diameter of 2.5 micrometres (µm) or less.

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.

Two targets for PM$_{2.5}$ have been set under The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023

- Annual Mean Concentration Target ('concentration target') - a maximum concentration of 10µg/m^3 to be met across England by 2040

- Population Exposure Reduction Target ('exposure target') - a 35% reduction in population exposure by 2040 (compared to a base year of 2018).

Defra has published an Environmental Improvement Plan setting interim targets and describing how these will be met. This can be viewed here Environmental Improvement Plan 2023 - GOV.UK (www.gov.uk)

PM$_{2.5}$ has been monitored in Huntingdonshire at Pathfinder House since 2014 and results have indicated a general downward trend over the years. The annual mean for PM$_{2.5}$ in 2024 was 7µg/m^3, which was a very slight increase compared to the level of 6.99µg/m^3 recorded in 2023 and still much lower than 8.3µg/m^3 measured in 2022. Table A.8 and Figure A.4 in Appendix A demonstrate the measured annual mean concentration of PM$_{2.5}$ in Huntingdonshire has been steadily falling, with the lowest recorded level in 2023. This reduction may have been assisted by the relocation of the A14, however it could be due to a number of factors such as meteorological conditions/construction levels/temperature (and resulting requirement for domestic heating) etc.

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

Huntingdonshire District Council is taking the following measures to address PM$_{2.5}$:

- Continue to liaise with the Local Planning Authority and developers requesting pre-app advice, to ensure air quality mitigation measures are considered for large developments to minimise any impact (Measurement 2 in Table 2.2).

- Continue to advise planning conditions to require a Construction Environmental Management Plan (CEMP) when considered necessary, in order to control dust from demolition and construction activities.

- Maintain the provision of advice to members of the public to minimise bonfires and unnecessary wood burning, and inform them of key advice documents, such as those provided by Defra regarding the reduction of air pollution from the use of wood burning stoves and open fires, and highlight the indoor air pollution risks from the use of solid fuel stoves etc.

- Continue supporting Clean Air Day and Clean Air Night, signposting members of the public to resources and advice regarding air quality and promotion of air quality information.

- Continue to provide information and guidance to members of the public regarding Solid Fuel Restrictions and work in partnership with the County Trading Standards Team to highlight any issues.

- The measures (1, 2, 3 & 5) discussed above in Section 2.2 and Table 2.2 will have co-benefits on multiple pollutants, including PM$_{2.5}$.

- In 2014 Huntingdonshire District Council joined with Cambridgeshire County Council Public Health and the other Cambridgeshire authorities to develop the transport and health joint strategic needs assessment which focused on PM$_{2.5}$ from transport, see [Transport-and-Health-JSNA-2015-Air-Pollution.pdf (cambridgeshireinsight.org.uk)](#). This is a completed measure.

- Continue to regulate and enforce sites covered by the Environmental Permitting regime and provide advice to minimise emissions and ensure continued environmental improvement.

- Attendance at the quarterly Cambridgeshire Pollution Prevention Group meetings where issues such as air quality are discussed with representatives from other adjoining Local Authorities, The County Council, and the Environment Agency to discuss best practice and partnership working.

- Huntingdonshire District Council is intending to provide an Air Quality Strategy (AQS) which will include consideration of $PM_{2.5}$ along with the requirements under Defra's Environmental Improvement Plan and the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023.

Huntingdonshire does not currently have any Smoke Control Areas within the district.

Public Health Outcomes Framework:

The Public Health Outcomes Framework (PHOF) is a tool used to track progress and understand trends in public health outcomes. It provides a framework for identifying key health indicators and measuring the impact of interventions on population health. The PHOF helps local authorities assess their performance against national averages and identify areas for improvement. Air pollution is one of these indicators due to the extensive evidence of the health impacts associated with it. The PHOF aims to increase healthy life expectancy, reduce differences in life expectancy and have healthy life expectancy between communities.

The Public Health Indicator for $PM_{2.5}$ provides a useful indication as to the burden associated with concentrations of $PM_{2.5}$ within Huntingdonshire.

Following a change in the calculation methodology used to estimate the indicator values in early 2022 (see previous ASRs for more information regarding this change), it is advised that caution should be used when interpreting trends, as data prior to and including 2021 were calculated differently.

The Public Health England PHOF indicator D01 *'Fraction of mortality attributable to particulate air pollution'* for Huntingdonshire in 2023 (the most recent year available) was 5.4%, a reduction of 0.6% from 6% in 2022. The 2023 values for Huntingdonshire are the same as Cambridgeshire and the East of England region and 0.2% higher than the England values (at 5.2%).

Public Health Outcomes Framework data trends for Huntingdonshire compared with England:

D01 - Fraction of mortality attributable to particulate air pollution (new method) New data   Proportion - %

Show confidence intervals   Show 99.8% CI values   ► More options
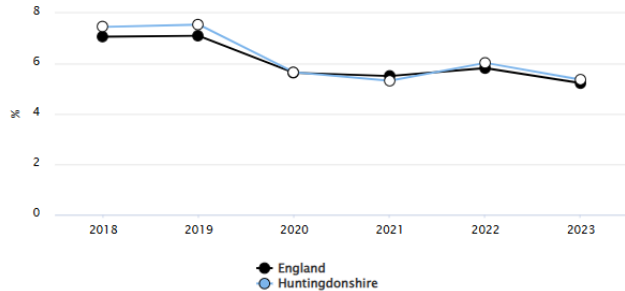
Recent trend: Could not be calculated

Period		Count	Value	Huntingdonshire 95% Lower CI	95% Upper CI	East of England	England
2018	○	-	7.5%	-	-	7.6%	7.1%
2019	○	-	7.5%	-	-	7.6%	7.1%
2020	○	-	5.7%	-	-	5.8%	5.6%
2021	○	-	5.3%	-	-	5.5%	5.5%
2022	○	-	6.0%	-	-	6.2%	5.8%
2023	○	-	5.4%	-	-	5.4%	5.2%

Source: Department for Environment, Food and Rural Affairs

Indicator Definitions and Supporting Information

Source: Public Health Outcomes Framework - Data - OHID (phe.org.uk)

Locally Huntingdonshire's figures are similar to the surrounding local authorities:

Fraction of mortality attributable to particulate air pollution in 2023 (%)
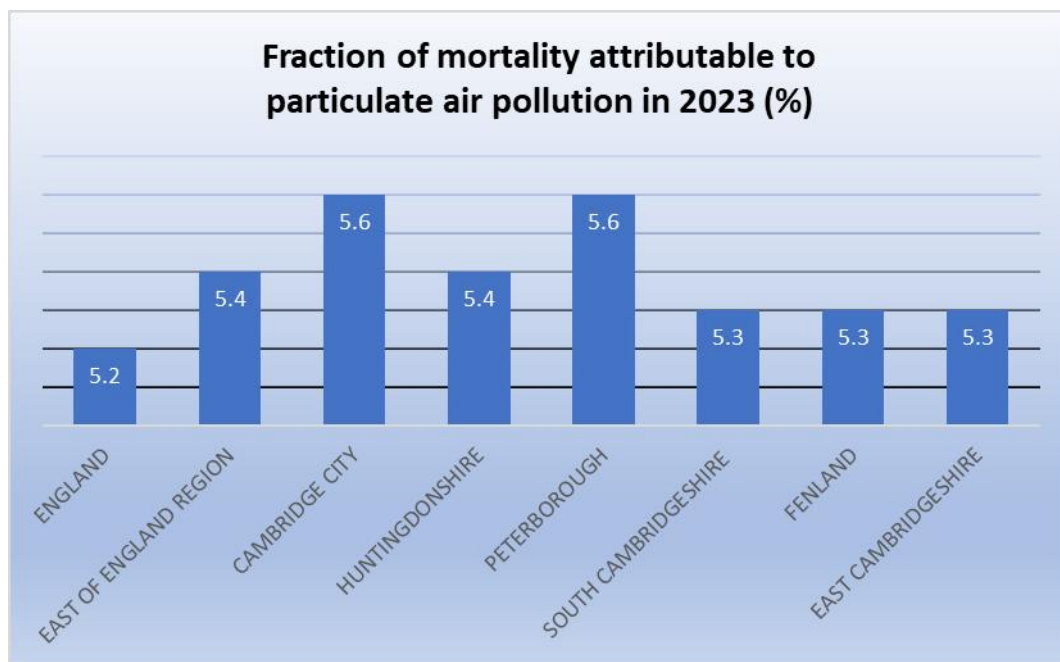
Source: Public Health Outcomes Framework - Data - OHID (phe.org.uk)

The data for 2023 for all districts within Cambridgeshire, as well as that for East of England and England indicates there has been a slight reduction in the fraction of mortality attributable to particulate air pollution compared to 2022.

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

This section sets out the monitoring undertaken within 2024 by Huntingdonshire 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

Huntingdonshire District Council undertook automatic (continuous) monitoring at one site during 2024. Table A.1 in Appendix A shows the details of the automatic monitoring site.

The equipment consists of a Serinus S40 NOx analyser and a FIDAS 200 particulate monitor, both of which are MCERTS certified. Data collection for 2024 again exceeded 99%, as it did in 2023. More information regarding this can be found in Appendix C.

The [Huntingdon Pathfinder House Data Download - Air Quality monitoring service (airqualityengland.co.uk)](airqualityengland.co.uk) page presents automatic monitoring results for Huntingdonshire District Council, with automatic monitoring results also available through the UK-Air website at Interactive monitoring networks map - Defra, UK.

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

3.1.2 Non-Automatic Monitoring Sites

Huntingdonshire District Council undertook non- automatic (i.e. passive) monitoring of NO_2 at 58 sites during 2024. This was reviewed at the end of 2024/beginning of 2025 with several changes being implemented in April 2025 to coincide with the new financial year and subsequent new tube contract. These changes will be discussed in next year's ASR.

Table A.2 in Appendix A presents the details of the non-automatic sites for 2024.

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

3.2 Individual Pollutants

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

3.2.1 Nitrogen Dioxide (NO$_2$)

Table A.3 and Table A.4 in Appendix A compare the ratified and adjusted monitored NO$_2$ annual mean concentrations for the past five years with the air quality objective of 40µg/m^3. Note that the concentration data presented represents the concentration at the location of the monitoring site, following the application of bias adjustment and annualisation, as required (i.e. the values are exclusive of any consideration to fall-off with distance adjustment).

For diffusion tubes, the full 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 (i.e. where results are within 10% of the objective, therefore for 2024 this was not required at any site within Huntingdonshire).

Data from the diffusion tubes indicated there were no breaches of the 40µg/m^3 annual mean objective during 2024 and measured levels decreased at the majority of sites compared to 2023. As discussed in the Executive Summary section, the largest decrease was at Yaxley with a reduction of 2.6µg/m^3 from 17.4µg/m^3 in 2023 to 14.8µg/m^3 in 2024, a reduction of 18%. The site with the largest percentage reduction was Godmanchester with a 27% reduction from 10.9µg/m^3 in 2023 to 8.6µg/m^3 in 2024.

Pollution levels remained the same (and well below the national objective) at 3 locations: Brampton 5 at 9.2µg/m^3, Huntingdon 1 at 9.1µg/m^3 and Alwalton at 10.9µg/m^3. There was a slight increase in pollution levels at two locations; Buckden 1 increased from 14.6µg/m^3 to 15.7µg/m^3 and Stibbington increased from 11.6µg/m^3 to 13.7µg/m^3. Both sites were still below the level measured in 2022 and remain well below the objective level. These

localised increases may be due to roadworks taking place on the A1 near the Stibbington site and renovation works at the Buckden 1 site.

The highest concentration measured by diffusion tube within the district during 2024 has changed location this year and is now at Needingworth Road in St Ives with a level of 22.5µg/m^3 compared to Pathfinder House (PFH) with the mean result of 21.8µg/m^3 for the triplicate tubes at that location. This compares to figures of 23.4µg/m^3 in 2023 for Needingworth Road and 24µg/m^3 in 2023 for PFH. Despite being the highest concentrations both sites remain well within the objective of 40µg/m^3.

As discussed earlier, Huntingdonshire District Council has considered it necessary to reject diffusion tube data for the majority of sites for November 2024 as the lab results were extremely low and indicated an error in the analysis. The lab was contacted who acknowledged a fault and are investigating. Fortunately there was sufficient coverage for the rest of the year so annualisation was not required at any site.

A review has been completed into the diffusion tube locations, with several changes proposed for the network, these are due to be implemented in April 2025 to coincide with the new financial year and subsequent new tube contract. These changes will be discussed in next year's ASR.

A bias adjustment factor is required to be utilised with diffusion tube monitoring concentration data under Government guidance LAQM Technical Guidance 2022 (TG22). This is due to the inherent uncertainty associated with this method. Huntingdonshire District Council has produced and utilised a localised bias adjustment figure of 0.79. This is similar to the national bias figure of 0.78 gained from the National Diffusion Tube Bias Adjustment Factor Spreadsheet (04/25). The difference in use of the local compared to the national adjustment factor is minor and being slightly higher the local figure gives the higher (poorer) result. For example at Needingworth Road, St Ives, which has the highest result in the district, the concentration is 22.5µg/m^3 using the local bias adjustment figure, compared to 22.2µg/m^3 using the national. The localised figure was utilised due to the data capture, the overall good precision and high quality chemiluminescence results. The methodology for gaining the bias adjustment figure can be found in Appendix C.

Data capture for the NO$_2$ analyser was excellent at 99.66%, and therefore there is no requirement to annualise the data in line with TG22. Further details regarding this can be found in Section 3.1 and Appendix C.

The NO$_2$ analyser measured an annual mean of 23µg/m^3 in 2024, down from 24.98µg/m^3 measured in 2023. This can be seen in Table A.3, whereas 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 and demonstrates there were no 1-hour means above 200µg/m^3. There were also no annual means greater than 60µg/m^3 for any of the diffusion tubes around the district, which (in line with TG22) indicates that an exceedance of the 1-hour mean objective was not likely to have occurred at any of the monitoring locations.

NO$_2$ results from the continuous monitor can be viewed online at the Air Quality England website at Huntingdon Pathfinder House Data Download - Air Quality monitoring service (airqualityengland.co.uk) where data can be downloaded.

All data has been properly ratified and corrected for bias where applicable.

Due to the excellent data capture for the continuous analyser Huntingdonshire District Council has again taken part in the diffusion tube co-location study to produce a localised bias adjustment factor. The local bias factor of 0.79 is similar to the national bias factor of 0.78 gained from the National Diffusion Tube Bias Adjustment Factor Spreadsheet (04/25). As the difference is minor, it has been considered the localised factor is more appropriate, especially due to the data capture, the overall good precision and high quality chemiluminescence results. More information regarding this is in Appendix C.

A distance correction calculation is not required and has not been completed as there are not any locations with an annual mean concentration above, or within 10% of the NO$_2$ annual objective of 40µg/m^3.

The overall trend this year has been a reduction in NO$_2$ levels and the data demonstrates that in 2024 all sites met the NO$_2$ objective of 40µg/m^3 and no results were within 10%. This includes at all sites within the final remaining AQMA in Huntingdon, indicating good ongoing compliance and providing sufficient evidence to pursue revocation. It is considered the continuing low trend is likely due to the relocation of the A14, improvements in vehicle emission standards and a change in travel behaviour.

3.2.2 Particulate Matter (PM$_{10}$)

PM$_{10}$, is continuously monitored at the Air Quality Monitoring Station (AQMS) located near Pathfinder House in Huntingdon.

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.

As discussed earlier, the results show the annual mean PM$_{10}$ figure decreased from 13.54µg/m^3 in 2023 to 12µg/m^3 in 2024. This remains well within the objective level 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. The results indicate there was 1 breach of the 24-hour objective (50µg/m^3) with a single daily mean reaching 53µg/m^3 during 2024, compared to 0 in 2023. It should however be noted that as there was only one breach the result remains compliant with the objectives.

Data capture for the FIDAS (Particulate Matter (PM) analyser) was excellent at 99.89%, and therefore there is no requirement to annualise the data in line with TG22. Further details regarding this can be found in Appendix C.

Tables A.6 and A.7 and the accompanying charts show the general trend over the last five years and indicate that there is an overall reduction in PM$_{10}$. Results show that there were no exceedances of any of the air quality objectives in 2024 at this location.

PM$_{10}$ results can also be viewed online at the Air Quality England website at [Huntingdon Pathfinder House Data Download - Air Quality monitoring service (airqualityengland.co.uk)](airqualityengland.co.uk) where data can be downloaded.

There are no proposed changes to the monitoring network or plans to declare an AQMA due to PM$_{10}$.

3.2.3 Particulate Matter (PM$_{2.5}$)

PM$_{2.5}$ is continuously monitored at the Air Quality Monitoring Station (AQMS) located near Pathfinder House.

Table A.8 in Appendix A and the associated chart presents the ratified and adjusted monitored PM$_{2.5}$ annual mean concentrations for the past five years indicating a downward trend. After falling from 8.3µg/m^3 in 2022 to 6.99µg/m^3 in 2023, PM$_{2.5}$ has increased very slightly to 7µg/m^3 in 2024.

As discussed above in the PM$_{10}$ section, the monitor had excellent data capture above 99%, so there was no requirement to annualise the data in line with TG22. PM$_{2.5}$ results can also be viewed online at the Air Quality England website at [Huntingdon Pathfinder House Data Download - Air Quality monitoring service (airqualityengland.co.uk)](https://airqualityengland.co.uk) where data can be downloaded.

There are no proposed changes to the monitoring network or plans to declare an AQMA due to PM$_{2.5}$.

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)
PFH	Huntingdon	Roadside	524102	271540	NO2, PM10, PM2.5, PM1	YES	No 1. Huntingdon	Chemiluminescent Light Scattering, Light Scattering, Light Scattering.	3	7	2.5

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)
St Neots 1	The Paddocks	Kerbside	517869	260132	NO2	No	22.0	22.0	No	3.0
St Neots 2	18 Cromwell Gardens	Roadside	519541	260280	NO2	No	8.0	4.0	No	3.0
St Neots 3	71 Avenue Road	Urban Background	518925	260503	NO2	No	4.0	1.0	No	3.0
St Neots 4	20 Harland Road	Urban Background	518489	260871	NO2	No	3.0	1.0	No	3.0
St Neots 5	8-10 High Street (Post Office)	Kerbside	518323	260263	NO2	No	0.0	1.0	No	3.0
St Neots 6	35 High Street (Traffic lights)	Kerbside	518433	260321	NO2	No	0.0	1.0	No	3.0
St Neots 7	17 Arundel Crescent	Suburban	518424	258556	NO2	No	0.0	17.0	No	1.8
St Neots 8	122 Lindisfarne Close	Suburban	518707	258260	NO2	No	4.0	31.0	No	3.0
St Neots 9	5 Duchess Close	Suburban	516370	259514	NO2	No	3.0	5.0	No	3.0
Southoe 1	2 Lees Lane	Roadside	518714	264308	NO2	No	24.0	2.0	No	1.8
Buckden 1	6 Perry Road	Roadside	518981	267370	NO2	No	0.0	12.0	No	1.8
Buckden 2	4 High Street (Roundabout)	Roadside	519082	267433	NO2	No	0.0	1.0	No	1.8

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
Buckden 3	34 High Street (shop)	Roadside	519161	267624	NO2	No	0.0	1.0	No	2.0
Buckden 4	11 Taylors Lane	Roadside	519197	267955	NO2	No	3.0	1.0	No	3.0
Brampton 1	RAF Brampton (Sparrow Close)	Roadside	520734	269623	NO2	No	10.0	0.5	No	3.0
Huntingdon 9	Ermine Street Huntingdon	Roadside	523575	272174	NO2	Yes AQMA 1	0.0	3.0	No	2.0
Brampton 3	1 Laws Crescent	Roadside	520155	271561	NO2	No	32.0	2.0	No	3.0
Brampton 4	25 Dorling Way	Roadside	519956	271461	NO2	No	6.0	1.5	No	3.0
Brampton 5	7 Hansell Road	Roadside	519839	271061	NO2	No	18.0	0.5	No	3.0
Catworth 1	1 Thrapston Road	Rural	508409	274876	NO2	No	42.0	42.0	No	3.0
PFH 1, PFH 2, PFH 3	Pathfinder House	Roadside	524102	271540	NO2	Yes AQMA 1	8.0	6.0	Yes	2.5
Huntingdon 1	23 Lodge Close	Suburban	523177	271627	NO2	No	3.0	2.0	No	3.0
Huntingdon 2	19 Nursery Road	Kerbside	524198	271949	NO2	Yes AQMA 1	0.0	1.0	No	1.8
Huntingdon 3	6 George Street	Kerbside	523661	271802	NO2	Yes AQMA 1	0.0	1.0	No	3.0
Huntingdon 4	1 St Peters Road	Kerbside	523435	272464	NO2	Yes AQMA 1	3.0	1.0	No	3.0

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)
Huntingdon 5	18 Blethan Drive	Roadside	522293	272909	NO2	Yes AQMA 1	3.0	2.0	No	3.0
Huntingdon 6	40 Hartford Road	Roadside	524274	271939	NO2	Yes AQMA 1	4.0	2.0	No	3.0
Godmanchester 1	25 Cambridge Villas	Roadside	525319	270571	NO2	No	3.0	12.0	No	3.0
Wood Green Animal Shelter	Car Park	Rural	526069	268254	NO2	No	0.0	65.0	No	3.0
Fenstanton 1	Hilton Road	Roadside	531427	268397	NO2	No	20.0	2.0	No	3.0
Earith 1	High Street Earith	Roadside	538460	274797	NO2	No	0.0	1.8	No	2.0
Fenstanton 3	1 Pear Tree Close	Rural	531063	268063	NO2	No	6.0	1.5	No	3.0
St Ives 1	2 The Pound	Urban Background	531206	272334	NO2	No	5.0	1.0	No	3.0
St Ives 2	59 Greenfields	Suburban	530850	270286	NO2	No	6.0	1.5	No	3.0
St Ives 3	6 Goldie Close	Roadside	529866	272285	NO2	No	11.0	6.0	No	3.0
Ramsey 1	5 Blenheim Road	Urban Background	528433	284936	NO2	No	4.0	2.0	No	3.0
Yaxley 1	2 London Road	Roadside	517480	292309	NO2	No	13.0	2.0	No	3.0
Stibbington 1	7 Great North Road	Roadside	508326	298684	NO2	No	22.0	2.0	No	3.0

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)
Alwalton 1	2 Royce Road	Roadside	513132	295723	NO2	No	11.0	4.0	No	3.0
Sawtry 1	81 Fen Lane	Suburban	517440	283443	NO2	No	4.0	2.0	No	3.0
Alconbury 1	54 Manor Lane	Roadside	518954	276010	NO2	No	6.0	2.0	No	3.0
Great Stukeley 1	Church of Jesus Christ - Ermine Street	Roadside	522000	274607	NO2	No	33.0	1.0	No	3.0
Huntingdon 7	6 Brampton Road	Roadside	523432	271760	NO2	Yes AQMA 1	10.0	2.0	No	3.0
Huntingdon 8	Main Road	Roadside	525289	272525	NO2	No	27.0	2.0	No	3.0
Hilton 1	1 Westbrook Close	Suburban	528836	266538	NO2	No	10.0	1.0	No	3.0
Fenstanton 4	25 High Street	Roadside	531729	268370	NO2	No	1.5	1.0	No	3.0
Alconbury 2	Lords Ways	Suburban	518955	275520	NO2	No	10.0	1.0	No	3.0
Brampton 6	Parish Hall Church Road	Roadside	521487	270803	NO2	No	19.0	1.0	No	3.0
Brampton 7	52 Elizabethan Way	Suburban	519874	270948	NO2	No	7.0	1.5	No	3.0
Offord D'Arcy 1	42 Gravely Road	Suburban	522127	266105	NO2	No	11.0	3.0	No	3.0
Offord Cluny 2	168 High Street	Roadside	521947	267178	NO2	No	11.0	3.0	No	3.0

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)
St Neots 10	81 Great North Road	Roadside	516921	258382	NO2	No	15.0	1.7	No	2.0
St Neots 11	119 Cambridge Road	Roadside	519925	260291	NO2	No	0.0	11.0	No	2.0
St Ives 4	Hill Rise	Kerbside	530529	272357	NO2	No	6.0	1.0	No	2.0
St Ives 5	Needingworth Road	Roadside	531963	272142	NO2	No	5.0	1.5	No	2.0
Bluntisham	Raptor Centre B1040	Roadside	533719	275865	NO2	No	15.0	3.0	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 NO₂ Monitoring Results: Automatic Monitoring (µg/m³)

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
PFH	524102	271540	Roadside	99.66	99.66	25	27	28.2	24.98	23

☒ **Annualisation has not been required as data capture is >75% (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 NO₂ 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. This has not been required.**

Notes:

The annual mean concentrations are presented as µg/m³.

Exceedances of the NO₂ annual mean objective of 40µg/m³ 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 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
St Neots 1	517869	260132	Kerbside	100.0	100.0	12.2	13.7	13.9	12.1	11.1
St Neots 2	519541	260280	Roadside	100.0	100.0	13.7	14.8	17.0	14.7	13.3
St Neots 3	518925	260503	Urban Background	100.0	100.0	10.9	10.8	11.5	9.8	9.7
St Neots 4	518489	260871	Urban Background	100.0	100.0	10.0	10.2	11.2	9.9	8.7
St Neots 5	518323	260263	Kerbside	100.0	100.0	18.6	21.0	23.2	20.8	19.1
St Neots 6	518433	260321	Kerbside	100.0	100.0	20.4	20.2	22.9	21.0	18.6
St Neots 7	518424	258556	Suburban	92.5	92.5	14.2	13.9	14.1	11.9	11.1
St Neots 8	518707	258260	Suburban	92.5	92.5	12.7	12.4	14.6	11.9	10.3
St Neots 9	516370	259514	Suburban	92.5	92.5	15.5	15.8	17.6	14.2	13.5
Southoe 1	518714	264308	Roadside	92.5	92.5	10.9	10.4	11.1	9.4	7.7
Buckden 1	518981	267370	Roadside	92.5	92.5	13.0	14.3	18.1	14.6	15.7

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
Buckden 2	519082	267433	Roadside	84.9	84.9	14.4	15.6	16.1	14.6	13.2
Buckden 3	519161	267624	Roadside	92.5	92.5	17.5	17.8	20.8	16.8	15.7
Buckden 4	519197	267955	Roadside	92.5	92.5	12.0	12.1	13.0	11.5	9.4
Brampton 1	520734	269623	Roadside	92.5	92.5	10.8	10.1	12.3	9.5	8.7
Huntingdon 9	523575	272174	Roadside	84.9	84.9	18.3	21.2	21.9	16.4	15.9
Brampton 3	520155	271561	Roadside	92.5	92.5	13.3	14.5	14.7	13.0	11.2
Brampton 4	519956	271461	Roadside	92.5	92.5	11.2	11.9	12.2	10.2	9.6
Brampton 5	519839	271061	Roadside	83.0	83.0	14.9	11.0	12.3	9.2	9.2
Catworth 1	508409	274876	Rural	92.5	92.5	11.7	11.7	13.2	11.8	10.8
PFH 1, PFH 2, PFH 3	524102	271540	Roadside	92.5	92.5	24.8	26.3	28.2	24.0	21.8
Huntingdon 1	523177	271627	Suburban	92.5	92.5	9.8	9.8	10.6	9.1	9.1
Huntingdon 2	524198	271949	Kerbside	92.5	92.5	14.9	17.0	17.7	14.6	13.6
Huntingdon 3	523661	271802	Kerbside	92.5	92.5	20.5	23.9	22.6	16.8	16.3

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
Huntingdon 4	523435	272464	Kerbside	92.5	92.5	15.4	17.0	17.9	16.0	13.7
Huntingdon 5	522293	272909	Roadside	92.5	92.5	11.0	11.7	12.9	11.0	9.4
Huntingdon 6	524274	271939	Roadside	92.5	92.5	14.8	14.9	17.6	14.9	13.1
Godmanchester 1	525319	270571	Roadside	92.5	92.5	9.3	10.9	11.8	10.9	8.6
Wood Green Animal Shelter	526069	268254	Rural	92.5	92.5	9.6	10.4	10.6	9.1	8.6
Fenstanton 1	531427	268397	Roadside	92.5	92.5	11.0	11.0	13.0	10.3	9.9
Earith 1	538460	274797	Roadside	92.5	92.5	10.6	10.3	10.7	10.2	10.1
Fenstanton 3	531063	268063	Rural	92.5	92.5	9.6	9.4	10.6	9.7	7.7
St Ives 1	531206	272334	Urban Background	92.5	92.5	11.3	11.3	12.9	11.0	9.7
St Ives 2	530850	270286	Suburban	92.5	92.5	12.0	13.0	13.4	12.6	11.2
St Ives 3	529866	272285	Roadside	92.5	92.5	10.6	10.6	11.9	9.9	8.6
Ramsey 1	528433	284936	Urban Background	92.5	92.5	11.7	12.8	13.4	12.0	11.0
Yaxley 1	517480	292309	Roadside	75.0	75.0	18.0	19.3	19.9	17.4	14.8

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
Stibbington 1	508326	298684	Roadside	92.5	92.5	14.7	14.0	15.9	11.6	13.7
Alwalton 1	513132	295723	Roadside	92.5	92.5	12.7	12.6	13.1	10.9	10.9
Sawtry 1	517440	283443	Suburban	92.5	92.5	11.9	13.1	14.2	11.9	10.6
Alconbury 1	518954	276010	Roadside	92.5	92.5	13.4	13.9	15.3	12.5	11.6
Great Stukeley 1	522000	274607	Roadside	92.5	92.5	10.7	10.2	11.1	8.1	7.4
Huntingdon 7	523432	271760	Roadside	92.5	92.5	18.8	21.4	21.5	18.9	17.3
Huntingdon 8	525289	272525	Roadside	92.5	92.5	14.6	15.1	16.2	14.0	12.2
Hilton 1	528836	266538	Suburban	92.5	92.5	8.5	8.3	9.1	7.9	7.0
Fenstanton 4	531729	268370	Roadside	100.0	100.0	11.5	11.9	12.7	11.9	10.9
Alconbury 2	518955	275520	Suburban	100.0	100.0	9.1	8.8	9.7	8.2	7.1
Brampton 6	521487	270803	Roadside	100.0	100.0	15.1	16.8	16.8	15.6	15.1
Brampton 7	519874	270948	Suburban	100.0	100.0	11.0	11.3	12.2	10.3	10.1
Offord D'Arcy 1	522127	266105	Suburban	100.0	100.0	8.8	8.8	9.5	7.9	7.4

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
Offord Cluny 2	521947	267178	Roadside	100.0	100.0	10.7	12.0	13.5	12.7	11.1
St Neots 10	516921	258382	Roadside	100.0	100.0	16.9	17.8	20.3	17.9	16.6
St Neots 11	519925	260291	Roadside	90.6	90.6	11.8	12.2	13.9	12.9	11.7
St Ives 4	530529	272357	Kerbside	100.0	100.0	18.6	19.8	21.9	19.1	17.0
St Ives 5	531963	272142	Roadside	100.0	100.0	21.3	24.3	24.5	23.4	22.5
Bluntisham	533719	275865	Roadside	90.6	90.6	**N/A**	**N/A**	17.5	15.5	14.7

☒ **Annualisation has not been required as data capture is not <75% (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 NO₂ Concentrations

The presentation of all of the following charts has been completed in line with Defra's requirements to take account of readers who are colour blind. If you have any issues viewing the charts, please contact us on the details at the top of this report and we can provide the information in another format.

Diffusion tube network - St Neots

Diffusion tube network - old A14

Diffusion tube network - A1

Diffusion tube network - rural/small towns
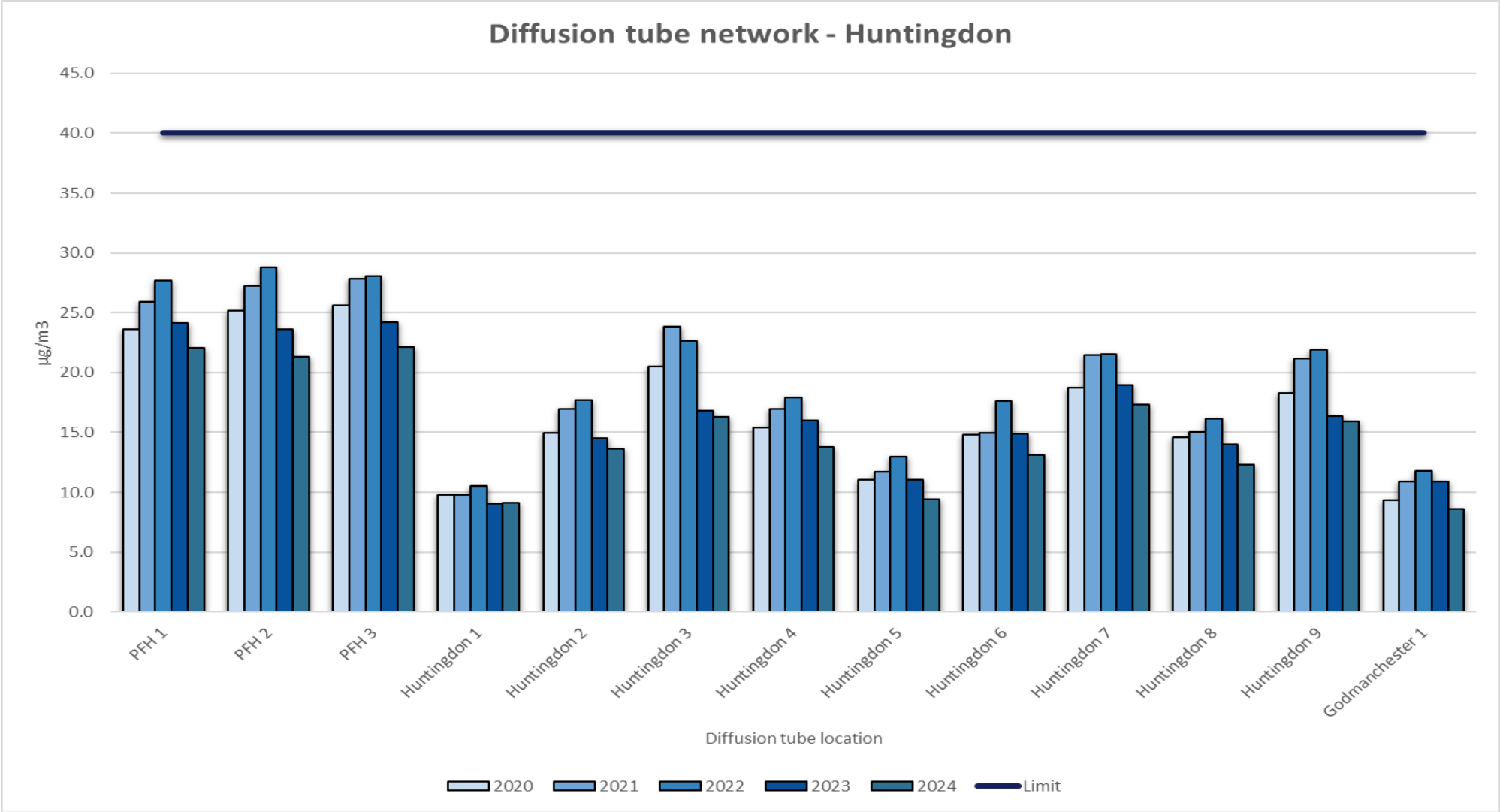
Table A.5 – 1-Hour Mean NO₂ Monitoring Results, Number of 1-Hour Means > 200µg/m³

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
PFH	524102	271540	Roadside	99.66	99.66	0	0	0 (86.4µg/m3)	0	0

Notes:

Results are presented as the number of 1-hour periods where concentrations greater than 200µg/m³ have been recorded.

Exceedances of the NO₂ 1-hour mean objective (200µg/m³ 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.
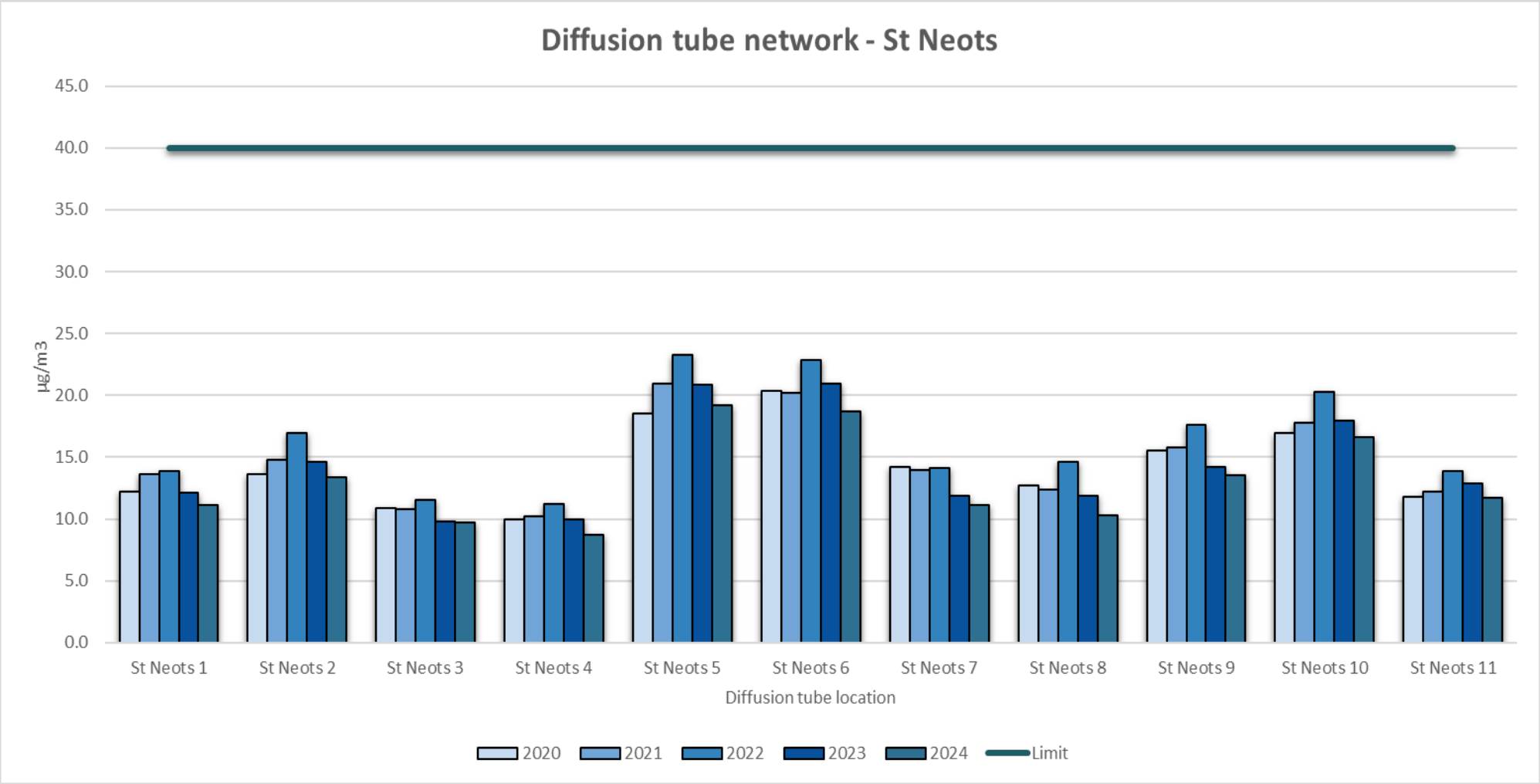
(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.
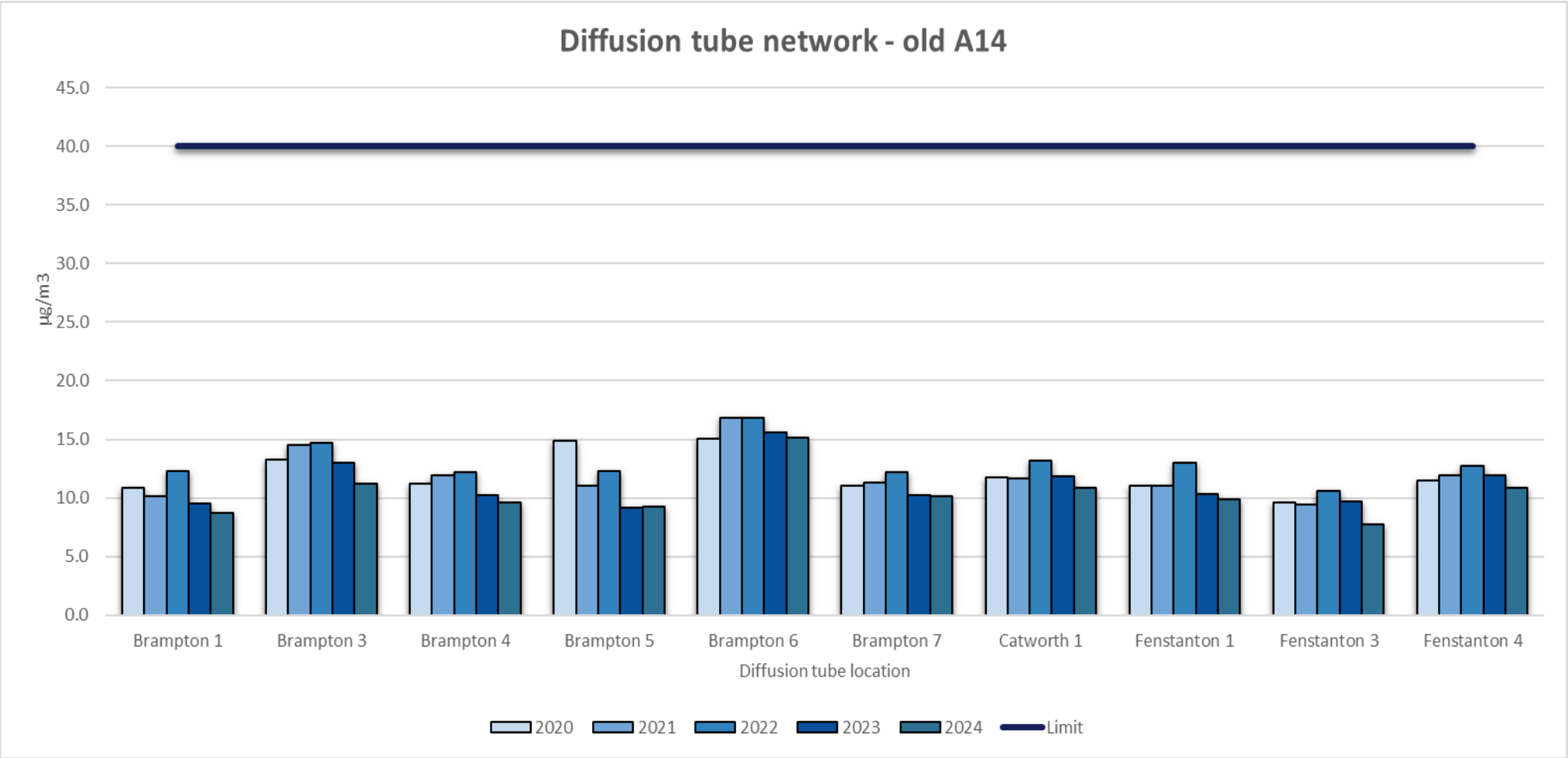
(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Table A.6 – Annual Mean PM$_{10}$ Monitoring Results (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
PFH	524102	271540	Roadside	99.89	99.89	14	15	14.8	13.54	12

☒ **Annualisation has not been required as data capture is >75% (in line with LAQM.TG22).**

Notes:

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

Exceedances of the PM$_{10}$ 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.

(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%).
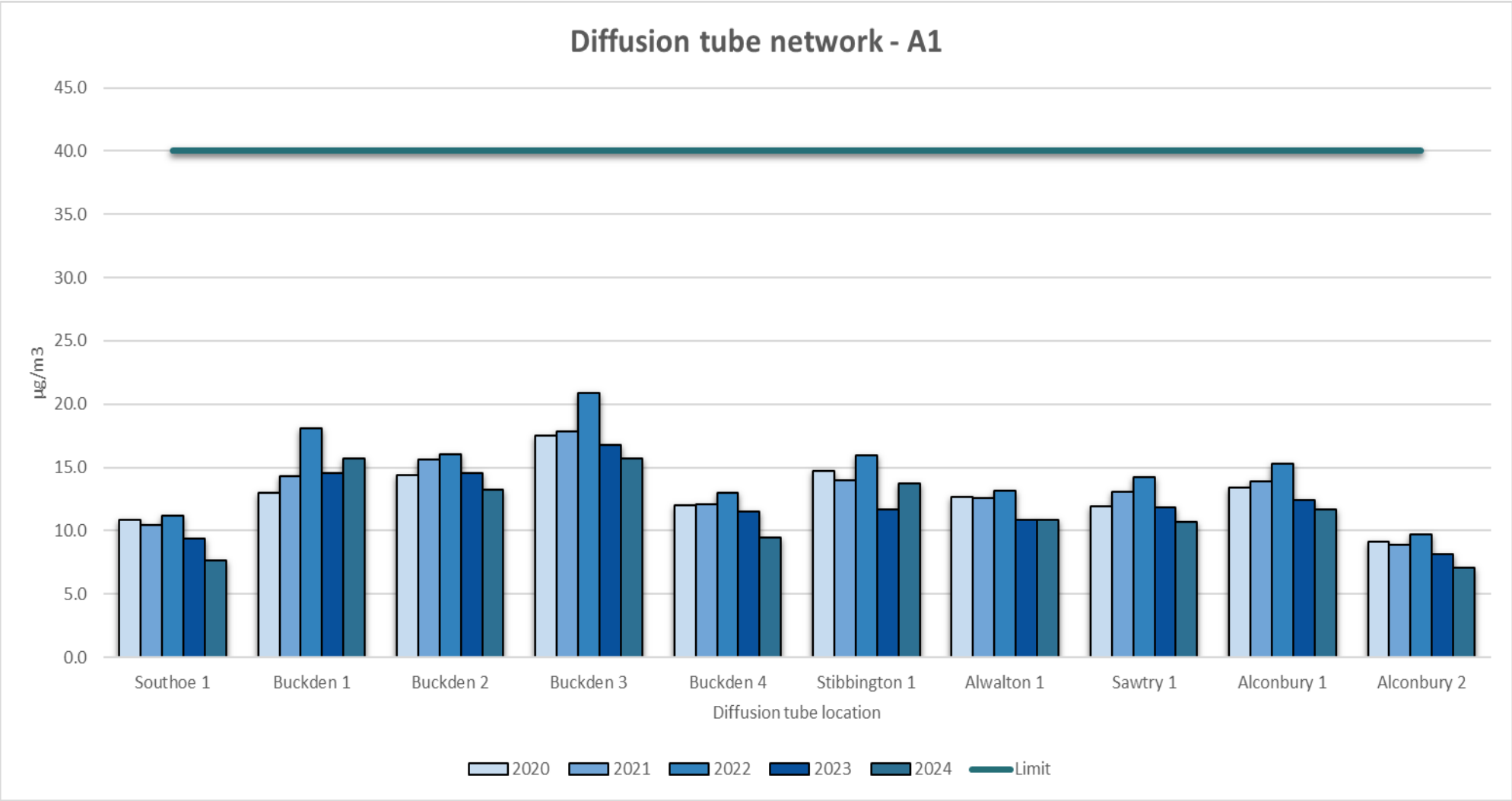
Figure A.2 – Trends in Annual Mean PM$_{10}$ Concentrations
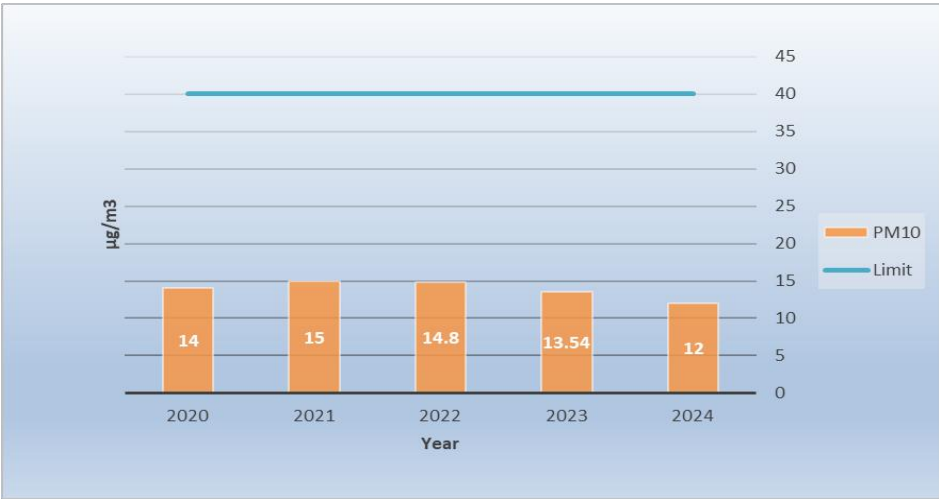
The presentation of this, and the following charts, has been completed to take account of readers who are colour blind, if you have any issues viewing the chart please contact us on the details at the top of this report and we can provide the information in another format.
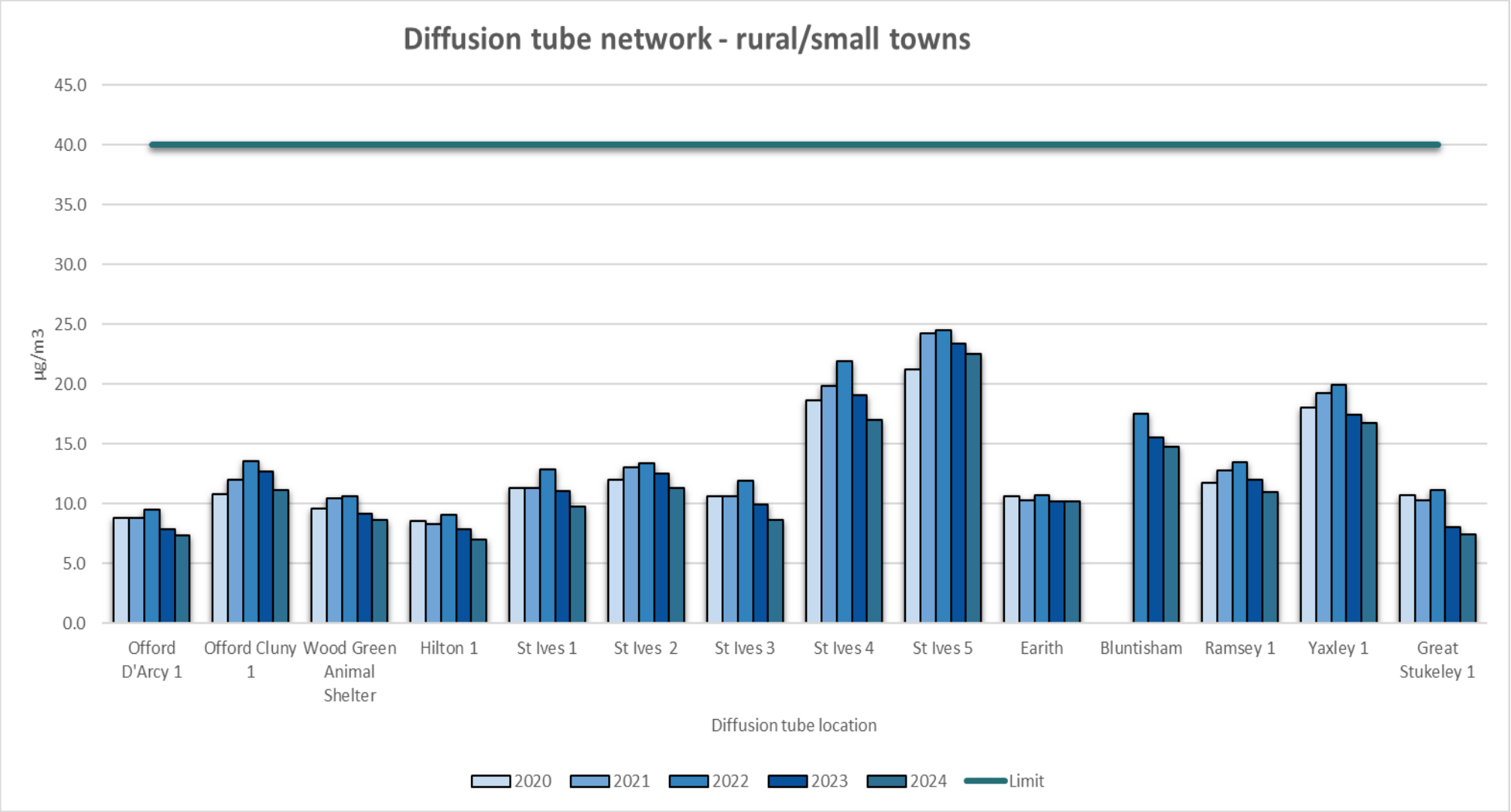
Table A.7 – 24-Hour Mean PM$_{10}$ Monitoring Results, Number of PM$_{10}$ 24-Hour Means > 50µg/m^3

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
PFH	524102	271540	Roadside	99.89	99.89	0	1	1 (26.1µg/m3)	0	1

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.3 – Trends in Number of 24-Hour Mean PM$_{10}$ Results > 50µg/m^3
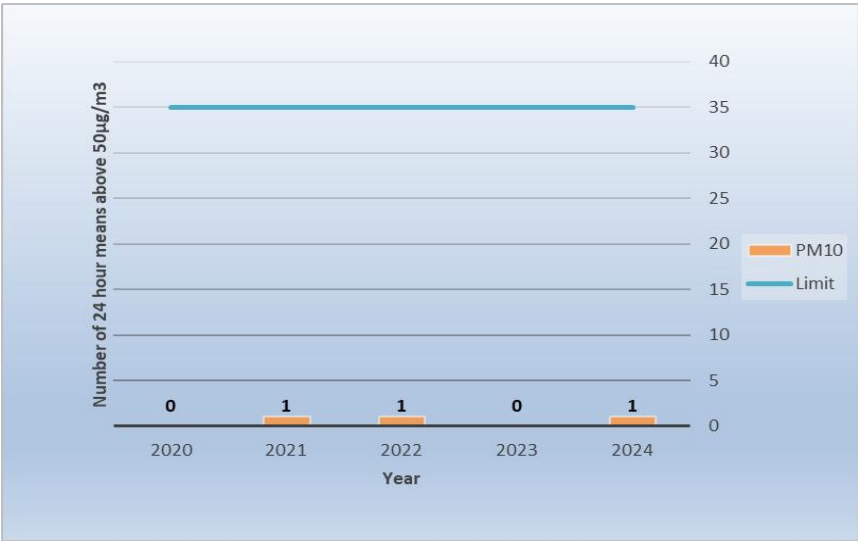
Table A.8 – Annual Mean PM2.5 Monitoring Results (µg/m³)

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
PFH	524102	271540	Roadside	99.89	99.89	8	8	8.3	6.99	7

☒ **Annualisation has not been required as data capture is >75% (in line with LAQM.TG22).**

Notes:

The annual mean concentrations are presented as µg/m³.

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.4 – Trends in Annual Mean PM2.5 Concentrations
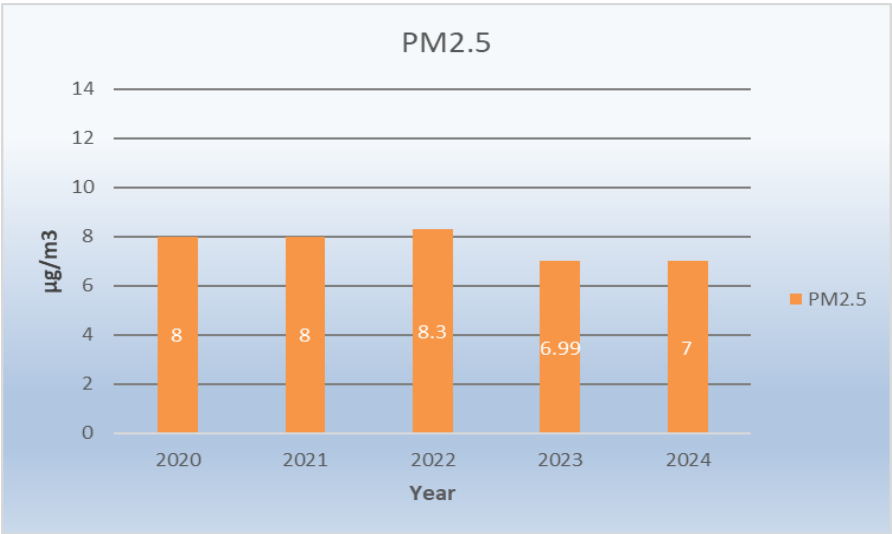
Appendix B: Full Monthly Diffusion Tube Results for 2024

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	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.79)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
St Neots 1	517869	260132	14.8	16.8	14.3	12.2	10.9	11.6	10.1	10.7	15.7	16.8	21.8	13.6	14.1	11.1	-	
St Neots 2	519541	260280	16.2	21.2	17.8	16.1	15.5	15.6	15.3	14.3	15.8	14.1	22.6	18.2	16.9	13.3	-	
St Neots 3	518925	260503	13.0	16.2	12.4	12.5	8.5	8.8	8.4	8.3	11.8	15.9	18.4	13.2	12.3	9.7	-	
St Neots 4	518489	260871	15.3	17.2	11.8	8.6	7.9	5.1	8.0	8.0	7.9	18.8	16.6	6.8	11.0	8.7	-	
St Neots 5	518323	260263	23.0	29.3	24.7	22.6	22.2	22.4	21.7	22.6	26.2	24.8	26.9	24.9	24.3	19.1	-	
St Neots 6	518433	260321	27.2	29.7	28.8	16.3	21.9	21.7	23.9	22.3	21.4	31.1	27.7	11.7	23.6	18.6	-	
St Neots 7	518424	258556	22.3	21.3	15.7	10.5	9.6	10.6	10.0	9.1	12.2	19.0		14.4	14.1	11.1	-	
St Neots 8	518707	258260	17.9	19.4	14.2	10.2	10.1	12.2	12.2	6.5	9.9	16.9		13.7	13.0	10.3	-	
St Neots 9	516370	259514	26.1	22.6	18.0	15.0	14.9	16.9	15.3	13.7	13.6	19.8		12.7	17.1	13.5	-	
Southoe 1	518714	264308	9.5	14.2	8.3	8.1	10.1	7.0	7.8	9.9	10.5	13.3		8.3	9.7	7.7	-	
Buckden 1	518981	267370	22.3	21.3	20.0	17.7	20.8	15.5	18.4	17.2	25.9	25.4		14.6	19.9	15.7	-	
Buckden 2	519082	267433	21.4	20.7	15.5	16.3	15.4	18.6		16.9	14.8	18.2		9.3	16.7	13.2	-	
Buckden 3	519161	267624	22.4	21.5	25.0	17.0	17.5	18.7	18.6	15.5	19.8	24.3		18.4	19.9	15.7	-	
Buckden 4	519197	267955	18.0	8.9	13.6	11.1	9.8	10.1	10.6	10.9	12.7	12.7		13.2	12.0	9.4	-	
Brampton 1	520734	269623	15.1	16.3	12.2	9.9	7.2	7.6	8.8	9.0	10.7	14.1		10.2	11.0	8.7	-	
Huntingdon 9	523575	272174	23.8	27.0	18.8	17.1	16.6	18.6		17.7	21.0	25.9		15.2	20.2	15.9	-	
Brampton 3	520155	271561	13.6	20.1	14.5	12.6	11.2	10.9	11.4	10.3	18.7	18.7		14.7	14.2	11.2	-	
Brampton 4	519956	271461	16.9	15.3	14.3	10.0	9.5	8.9	9.5	10.1	12.9	15.6		11.3	12.2	9.6	-	

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 (0.79)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
Brampton 5	519839	271061	17.6	18.4	13.2	11.1	6.6	8.9	9.2	9.3	8.4	14.1			11.7	9.2	-	
Catworth 1	508409	274876	9.4	19.2	15.5	11.5	10.4	13.2	14.8	15.2	12.0	16.0		13.7	13.7	10.8	-	
PFH 1	524102	271540	23.1	33.6	30.0	24.1	28.2	29.3	29.5	25.8	28.3	30.2		24.9	-	-	-	Triplicate Site with PFH 1, PFH 2 and PFH 3 - Annual data provided for PFH 3 only
PFH 2	524102	271540	13.9	30.8	28.8	25.7	30.1	30.5	28.5	25.2	27.2	32.8		23.7	-	-	-	Triplicate Site with PFH 1, PFH 2 and PFH 3 - Annual data provided for PFH 3 only
PFH 3	524102	271540	24.9	34.8	29.6	25.0	26.0	28.4	29.3	27.8	25.6	33.8		23.2	27.7	21.8	-	Triplicate Site with PFH 1, PFH 2 and PFH 3 - Annual data provided for PFH 3 only
Huntingdon 1	523177	271627	16.0	16.1	12.2	9.3	9.0	8.9	9.1	8.5	12.2	14.1		11.9	11.6	9.1	-	
Huntingdon 2	524198	271949	19.5	22.5	16.7	13.6	15.6	15.4	14.1	14.7	17.0	21.5		19.0	17.2	13.6	-	
Huntingdon 3	523661	271802	24.8	29.4	18.2	17.8	18.6	19.1	19.1	17.8	17.9	24.0		20.5	20.7	16.3	-	
Huntingdon 4	523435	272464	28.3	22.5	19.6	14.7	15.7	15.5	15.1	14.7	14.4	15.5		15.4	17.4	13.7	-	
Huntingdon 5	522293	272909	13.1	15.4	12.1	10.0	10.2	11.5	10.3	10.5	11.4	14.2		12.8	12.0	9.4	-	
Huntingdon 6	524274	271939	17.3	24.0	17.7	13.4	10.5	15.7	14.6	15.5	15.3	20.1		18.4	16.6	13.1	-	
Godmanchester 1	525319	270571	19.1	15.5	12.2	9.1	10.7	7.7	7.4	5.7	14.5	14.4		3.7	10.9	8.6	-	
Wood Green Animal Shelter	526069	268254	16.3	12.8	10.8	8.9	7.1	8.2	7.9	8.9	10.4	16.1		12.5	10.9	8.6	-	
Fenstanton 1	531427	268397	16.1	16.4	14.1	9.7	9.9	10.3	9.9	9.8	12.0	16.6		13.0	12.5	9.9	-	
Earith 1	538460	274797	17.4	13.8	10.1	26.9	10.0	10.5	8.2	8.6	10.6	12.0		13.3	12.9	10.1	-	
Fenstanton 3	531063	268063	9.8	14.3	10.6	8.5	7.3	8.1	7.5	9.3	8.7	12.2		11.6	9.8	7.7	-	
St Ives 1	531206	272334	16.7	15.6	14.0	10.2	9.0	9.4	10.4	9.4	12.4	15.3		13.8	12.4	9.7	-	
St Ives 2	530850	270286	22.0	18.3	12.3	13.6	12.7	13.3	11.6	10.0	13.1	15.2		14.8	14.3	11.2	-	
St Ives 3	529866	272285	14.8	14.5	14.8	6.2	8.1	8.1	8.5	8.1	9.9	14.2		12.8	10.9	8.6	-	
Ramsey 1	528433	284936	20.0	16.7	14.7	11.4	11.3	10.6	11.6	10.2	14.8	17.0		14.8	13.9	11.0	-	
Yaxley 1	517480	292309	18.0	26.0	19.7	19.1	17.7	18.3	15.1	17.4				17.3	18.7	14.8	-	

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 (0.79)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
Stibbington 1	508326	298684	15.7	23.5	19.1	13.4	15.1	20.4	18.1	17.6	12.0	20.7		15.1	17.3	13.7	-	
Alwalton 1	513132	295723	17.7	13.4	10.0	12.5	11.9	15.5	14.7	12.8	13.0	17.2		13.0	13.8	10.9	-	
Sawtry 1	517440	283443	19.5	17.6	13.3	10.4	14.4	11.2	9.3	8.8	13.1	16.8		14.2	13.5	10.6	-	
Alconbury 1	518954	276010	19.4	18.8	16.8	10.3	14.1	12.3	12.1	9.3	14.5	20.5		14.4	14.8	11.6	-	
Great Stukeley 1	522000	274607	13.2	13.3	10.0	8.2	6.6	6.3	7.8	9.2	7.4	12.3		9.0	9.4	7.4	-	
Huntingdon 7	523432	271760	28.8	25.5	21.6	18.6	19.6	21.8	19.1	17.7	24.6	19.9		24.5	22.0	17.3	-	
Huntingdon 8	525289	272525	19.6	21.4	18.9	11.9	12.3	12.2	13.4	13.9	13.2	17.8		16.3	15.5	12.2	-	
Hilton 1	528836	266538	13.7	11.0	10.3	7.4	6.9	6.3	5.9	6.3	9.1	11.0		9.7	8.9	7.0	-	
Fenstanton 4	531729	268370	12.7	15.2	16.5	11.4	11.1	10.4	11.2	10.7	12.6	17.9	20.7	15.1	13.8	10.9	-	
Alconbury 2	518955	275520	11.1	12.1	11.2	7.1	6.9	6.3	6.4	7.3	7.4	10.3	12.8	8.7	9.0	7.1	-	
Brampton 6	521487	270803	22.4	26.6	18.6	16.1	15.6	17.5	15.2	15.6	16.0	21.3	25.9	18.6	19.1	15.1	-	
Brampton 7	519874	270948	15.6	17.5	14.5	10.9	8.5	8.8	9.5	9.8	11.5	15.8	18.5	13.3	12.9	10.1	-	
Offord D'Arcy 1	522127	266105	4.2	11.8	10.4	7.9	6.3	6.3	9.2	6.9	8.7	12.7	16.5	11.2	9.3	7.4	-	
Offord Cluny 2	521947	267178	19.3	16.6	12.8	9.7	12.0	10.2	11.6	10.9	14.3	16.4	20.5	14.5	14.1	11.1	-	
St Neots 10	516921	258382	28.6	21.9	22.0	19.9	20.4	16.2	18.1	14.9	23.5	22.9	26.1	18.2	21.1	16.6	-	
St Neots 11	519925	260291	18.7	18.6	15.3	12.5	12.5	11.7	14.1	11.8	15.6	14.6	17.7		14.8	11.7	-	
St Ives 4	530529	272357	26.9	22.5	22.4	20.5	19.3	20.2	21.4	17.1	22.3	22.5	22.1	21.4	21.6	17.0	-	
St Ives 5	531963	272142	32.6	31.8	27.8	26.7	29.4	26.8	26.6	23.8	30.7	30.0	34.5	21.5	28.5	22.5	-	
Bluntisham	533719	275865	22.1	23.5	19.3	13.0		15.3	17.3	17.6	16.7	22.9	23.0	14.9	18.7	14.7	-	

☒ **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.**

☒ **Huntingdonshire 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.

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

New or Changed Sources Identified Within Huntingdonshire During 2024

Continued residential and industrial development is taking place, but Huntingdonshire District Council has not identified any significant new sources relating to air quality within the reporting year of 2023. See page vii above for more detail.

Additional Air Quality Works Undertaken by Huntingdonshire During 2024

Huntingdonshire District Council has not completed any additional works within the reporting year of 2024.

QA/QC of Diffusion Tube Monitoring

Huntingdonshire District Council continue to have a contract with SOCOTEC to provide and analyse diffusion tubes. The method of preparation is by spiking acetone: triethanolamine (50:50) onto the grids prior to the tubes being assembled. Samples are analysed at the Didcot testing facility in accordance with SOCOTEC's standard operating procedure ANU/SOP/1015. This method meets the guidelines set out in DEFRA's *'Diffusion Tubes For Ambient NO2 Monitoring: Practical Guidance.'* The analysis of diffusion tube samples to determine the amount of nitrogen dioxide present on the tube is also within the scope of SOCOTEC's UKAS schedule. In the AIR PT inter-comparison scheme for comparing spiked Nitrogen Dioxide diffusion tubes, SOCOTEC currently holds the highest rank of a Satisfactory laboratory.

Huntingdonshire District Council has considered it necessary to reject data for the majority of sites in November 2024 due to unusually low figures and a lab error. These occurred over most of the district, with no reasonable pattern or explanation. *'Reruns after machine error'* was stated within the comments section of the results and the lab was contacted who confirmed *'the values put forth was after the error. We are looking into the matter as to why this has happened and we will keep you updated once we know about it'*. However,

levels after the error were all <0.6 and as this related to a large number of our sites it was considered that the most appropriate action was to reject this data as it was considered erroneous in line with TG22.

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

Diffusion Tube Annualisation

Even with the exclusion of most of November's data all diffusion tube monitoring locations within the district of Huntingdonshire recorded data capture of above 75% therefore annualisation was not required for any of the monitoring data. In addition, any sites with data capture below 25% do not require annualisation, which is again not applicable for HDC.

Diffusion Tube Bias Adjustment Factors

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

Due to the excellent data capture for the continuous analyser Huntingdonshire District Council have applied a local bias adjustment factor of 0.79 to the 2024 monitoring data. A summary of bias adjustment factors used by Huntingdonshire District Council over the past five years is presented in Table C.1.

The localised bias adjustment figure of 0.79 is similar to the national bias figure of 0.78 gained from the National Diffusion Tube Bias Adjustment Factor Spreadsheet (04/25). The localised figure was utilised due to the excellent data capture (in excess of 99%) for the continuous analyser, the overall good precision and high quality chemiluminescence results. The difference in use of the local, compared to the national bias factor is minor, for example at Needingworth Road, St Ives (which has the highest result) the local bias factor gives a result of 22.5µg/m^3, this decreases slightly to 22.2µg/m^3 using the national bias factor, however at most sites once rounding has been factored in, there is very little

change in results and it should be noted that we are utilising the higher figure, therefore giving the worst case result.

The use of a localised bias adjustment factor has been deemed appropriate in previous years and has been used since the replacement of our monitoring equipment, with the exception of 2022 where a national figure was utilised due to poor data capture.

Table C.1 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	Local		0.79
2023	Local	-	0.75
2022	National	03/23	0.76
2021	Local	-	0.72
2020	Local	-	0.68

Table C.2 – Local Bias Adjustment Calculation

	Local Bias Adjustment Input 1	Local Bias Adjustment Input 2	Local Bias Adjustment Input 3	Local Bias Adjustment Input 4	Local Bias Adjustment Input 5
Periods used to calculate bias	10				
Bias Factor A	0.79 (0.75 - 0.83)				
Bias Factor B	27% (20% - 33%)				
Diffusion Tube Mean (µg/m³)	28.4				
Mean CV (Precision)	4.4%				
Automatic Mean (µg/m³)	22.4				
Data Capture	100%				
Adjusted Tube Mean (µg/m³)	22 (21 - 24)				

Notes:

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

NO$_2$ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO$_2$ concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO$_2$ fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO$_2$ concentrations corrected for distance are presented in Table B.1.

As the distance correction should be considered at any monitoring site where the annual mean concentration is greater than 36µg/m^3 and the monitoring site is not located at a point of relevant exposure it should be noted that due to the results gained no diffusion tube NO$_2$ monitoring locations within Huntingdonshire required distance correction during 2024.

QA/QC of Automatic Monitoring

During 2024 Huntingdonshire District Council held a Service Contract for our AQMS with Matts Monitors and a contract with Ricardo to provide independent Quality Assurance/Quality Control audits and data management, including ratification. QA/QC and servicing reports are available on request. Fully ratified results are available online at the Air Quality England website at [Huntingdon Pathfinder House Data Download - Air Quality monitoring service (airqualityengland.co.uk)](#) where data can be downloaded. All automatic monitoring data within the ASR is fully ratified.

Local Authority officer's visit the site and complete a calibration every 2 weeks as part of the Local Site Operator (LSO) duties.

Servicing and QA/QC are completed on a six-monthly basis.

PM$_{10}$ and PM$_{2.5}$ Monitoring Adjustment

The FIDAS 200 particulate monitor utilised within Huntingdonshire does not require the application of a correction factor for PM$_{10.}$ However, for PM$_{2.5}$ a factor of 0.9434 is applied. This follows section 7.174 in TG (22). The data downloaded from the AQE website already has this correction factor applied.

Automatic Monitoring Annualisation

The automatic monitoring station within Huntingdonshire recorded data capture of greater than 75% therefore it was not required to annualise any monitoring data. In addition, any sites with a data capture below 25% do not require annualisation.

NO$_2$ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO$_2$ concentration at the nearest location relevant for exposure has been estimated using the NO$_2$ fall-off with distance calculator available on the LAQM Support website.

As mentioned above under the diffusion tube section, distance correction should be considered at any monitoring site where the annual mean concentration is greater than 36μg/m^3 and the monitoring site is not located at a point of relevant exposure. Due to the results obtained at the automatic NO$_2$ monitoring location within Huntingdonshire, no distance correction was required during 2024.

Appendix D: Map(s) of Monitoring Locations and AQMAs
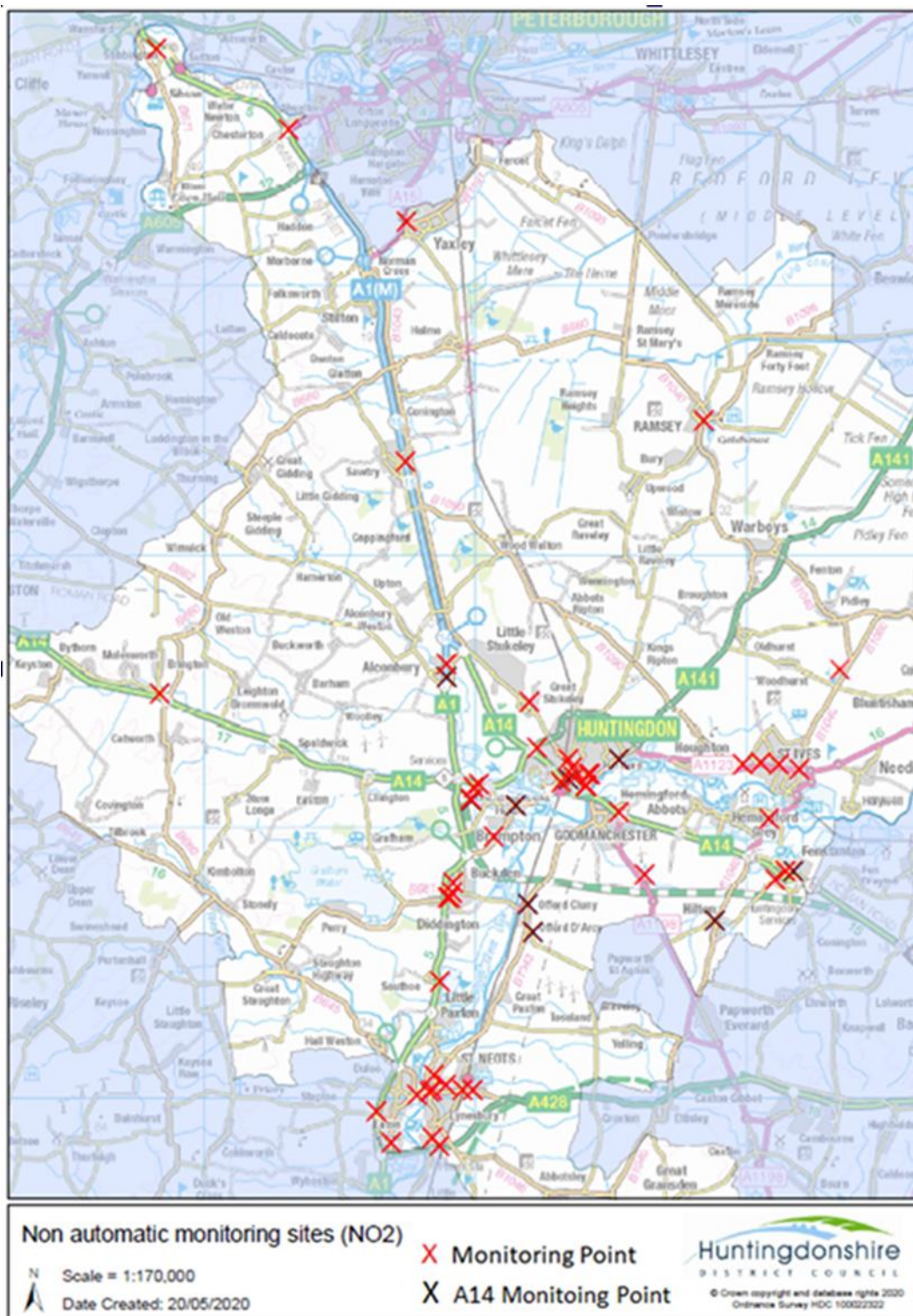
51

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

Non automatic monitoring sites (NO2)

N Scale = 1:170,000
Date Created: 20/05/2020

X Monitoring Point
X A14 Monitoing Point

Huntingdonshire
DISTRICT COUNCIL
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Ordnance Survey HDC 100022322

Figure D.2 – Map of Huntingdon AQMA Diffusion Tube NO2 monitoring locations - overview:

Huntingdon AQMA and monitoring locations

N
Scale = 1:15,000
Date Created: 21/06/2023

AQMA
Monitoring Point ⭐   A14 Monitoring Point ☆

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Ordnance Survey HDC 100022322
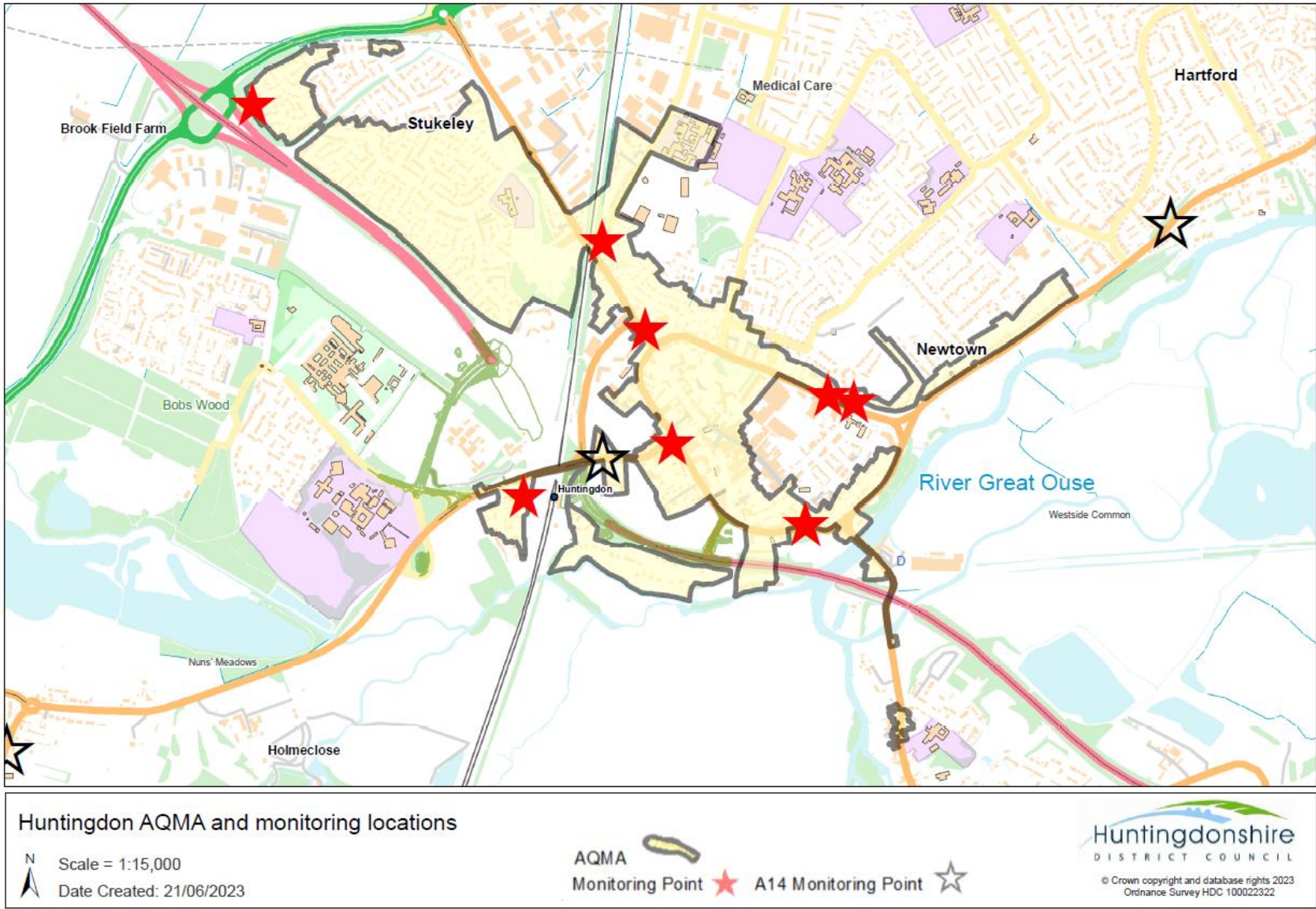
Figure D.3 – Map of Huntingdon AQMA Diffusion Tube NO2 monitoring locations:

Huntingdon AQMA and monitoring locations

N
Scale = 1:7,000
Date Created: 19/06/2023

AQMA
Monitoring Point ★ A14 Monitoring Point ☆

Huntingdon
DISTRICT COUNCIL
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Ordnance Survey HDC 100022322
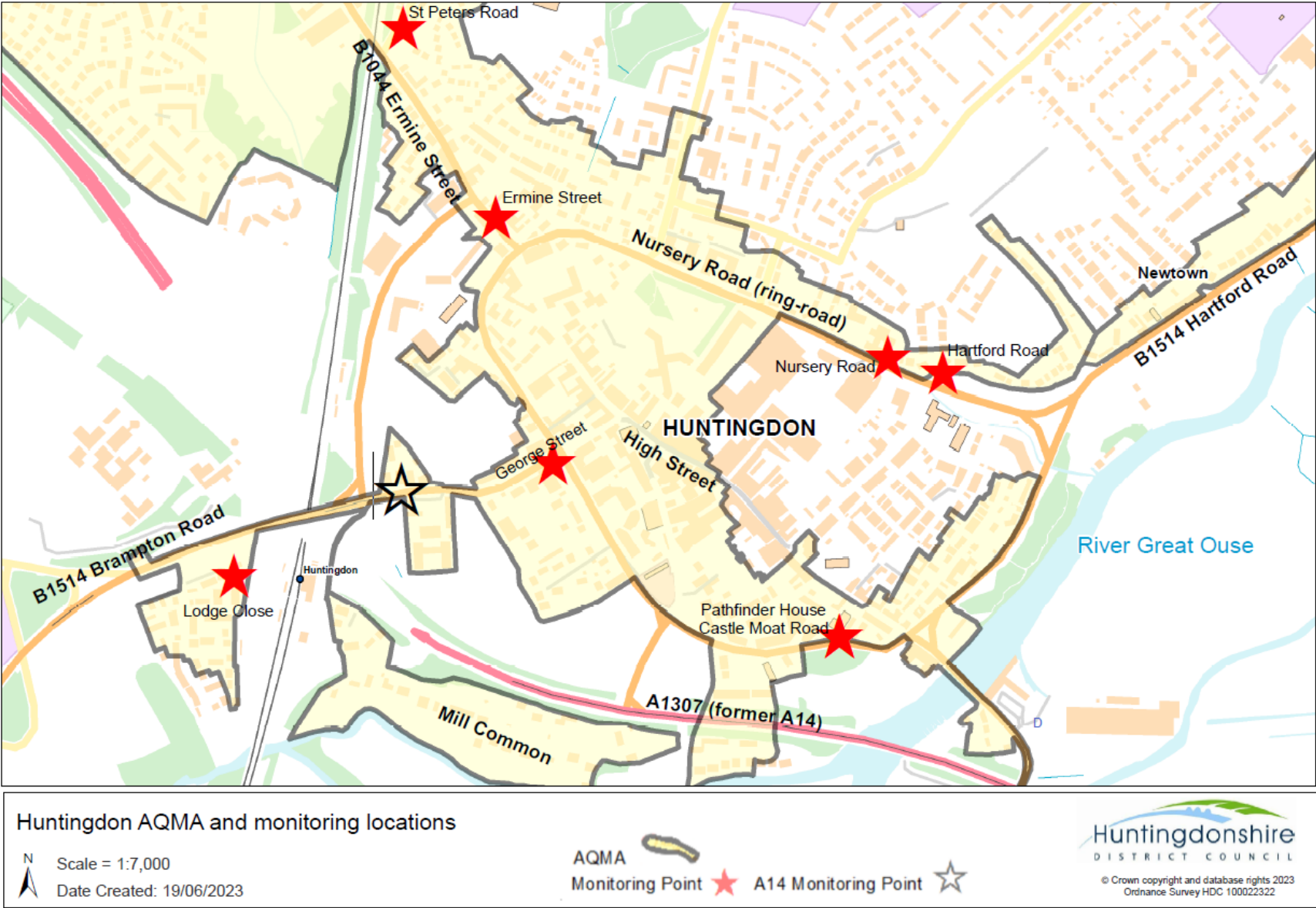
Figure D.4 – Map of Huntingdon AQMA Diffusion Tube NO2 monitoring locations:

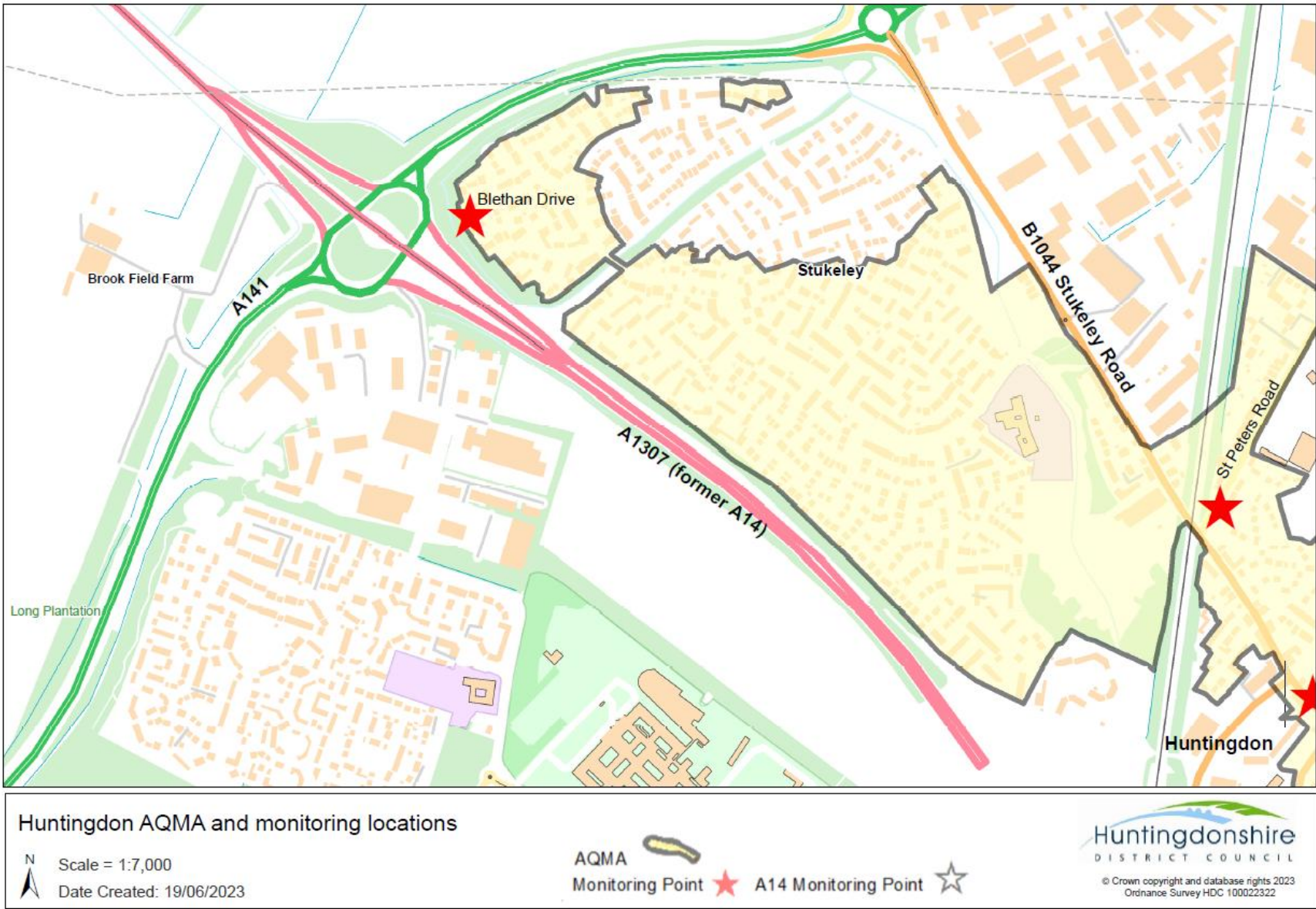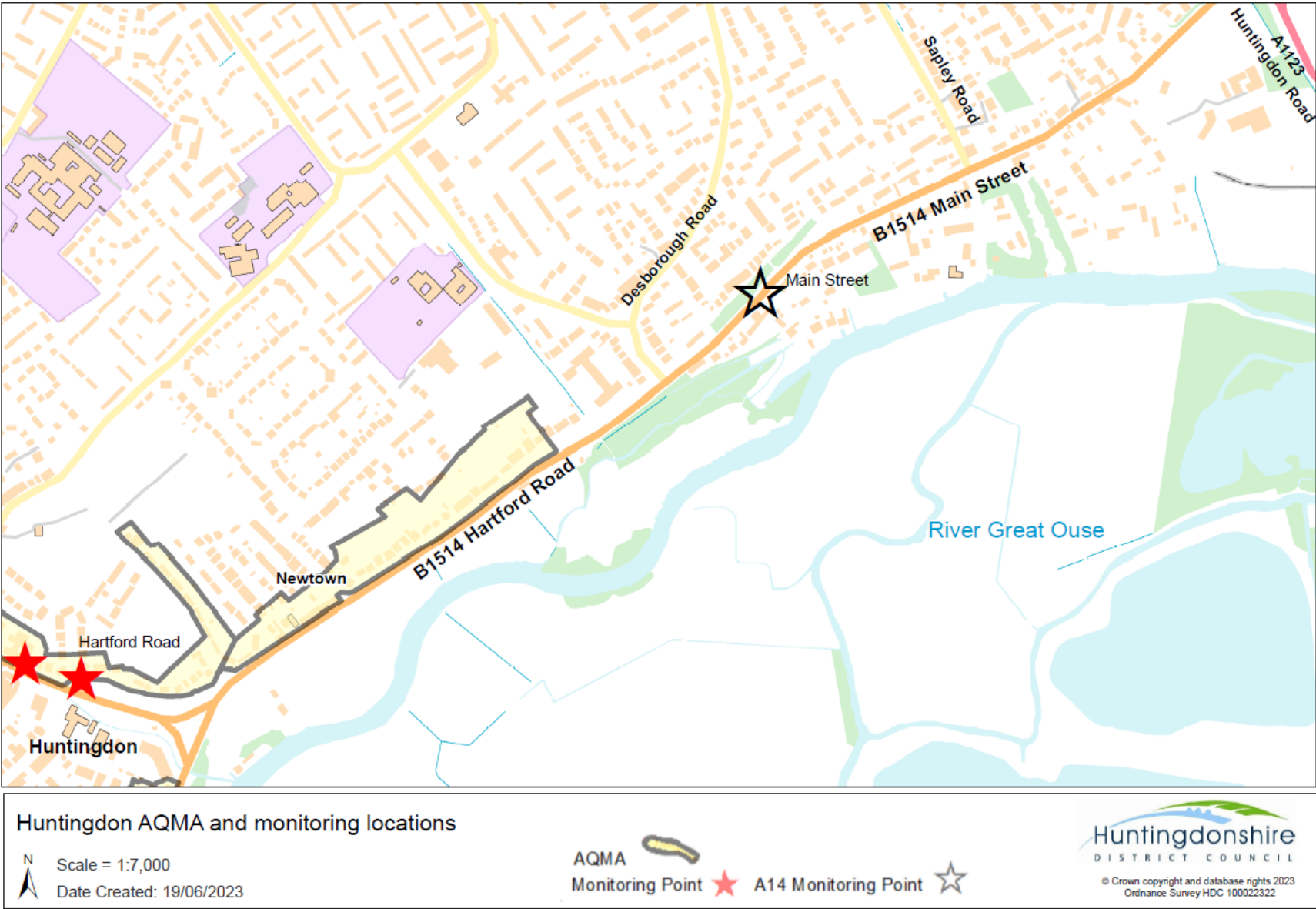**Figure D.5 – Map of Huntingdon AQMA Diffusion Tube NO2 monitoring locations:**

Huntingdon AQMA and monitoring locations

N
Scale = 1:7,000
Date Created: 19/06/2023

AQMA
Monitoring Point ★ A14 Monitoring Point ☆

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Figure D.6 – Map of the Automatic NO₂, PM₁₀ and PM₂.₅ monitoring location:

Huntingdonshire's Air Quality Monitoring Station

Date: 13 June 2024

Produced by: 3C Shared Services Mapping Portal

Scale: 1:200,000 @ A4
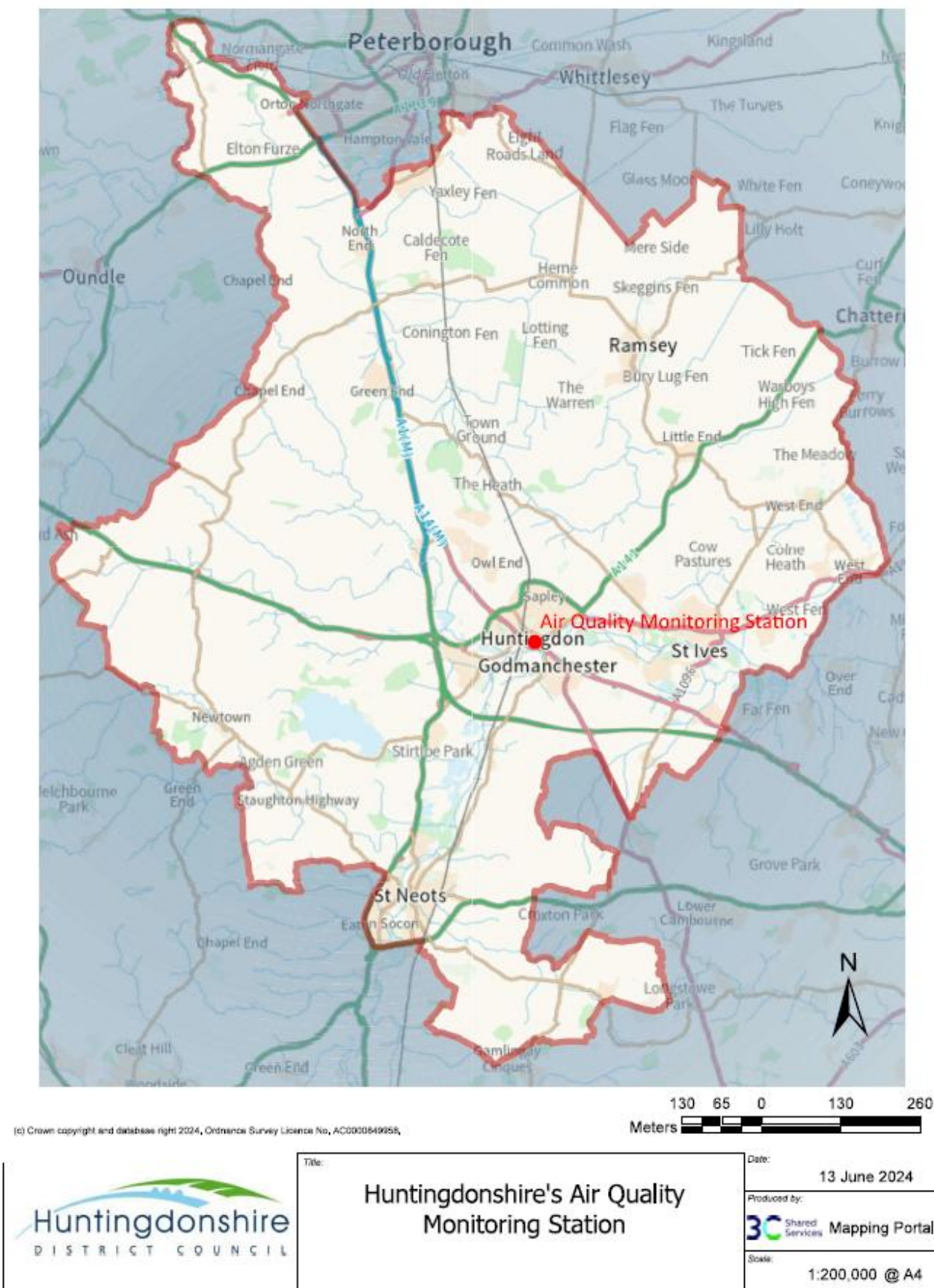
Figure D.7 – Map of the Automatic NO₂, PM₁₀ and PM₂.₅ monitoring location:
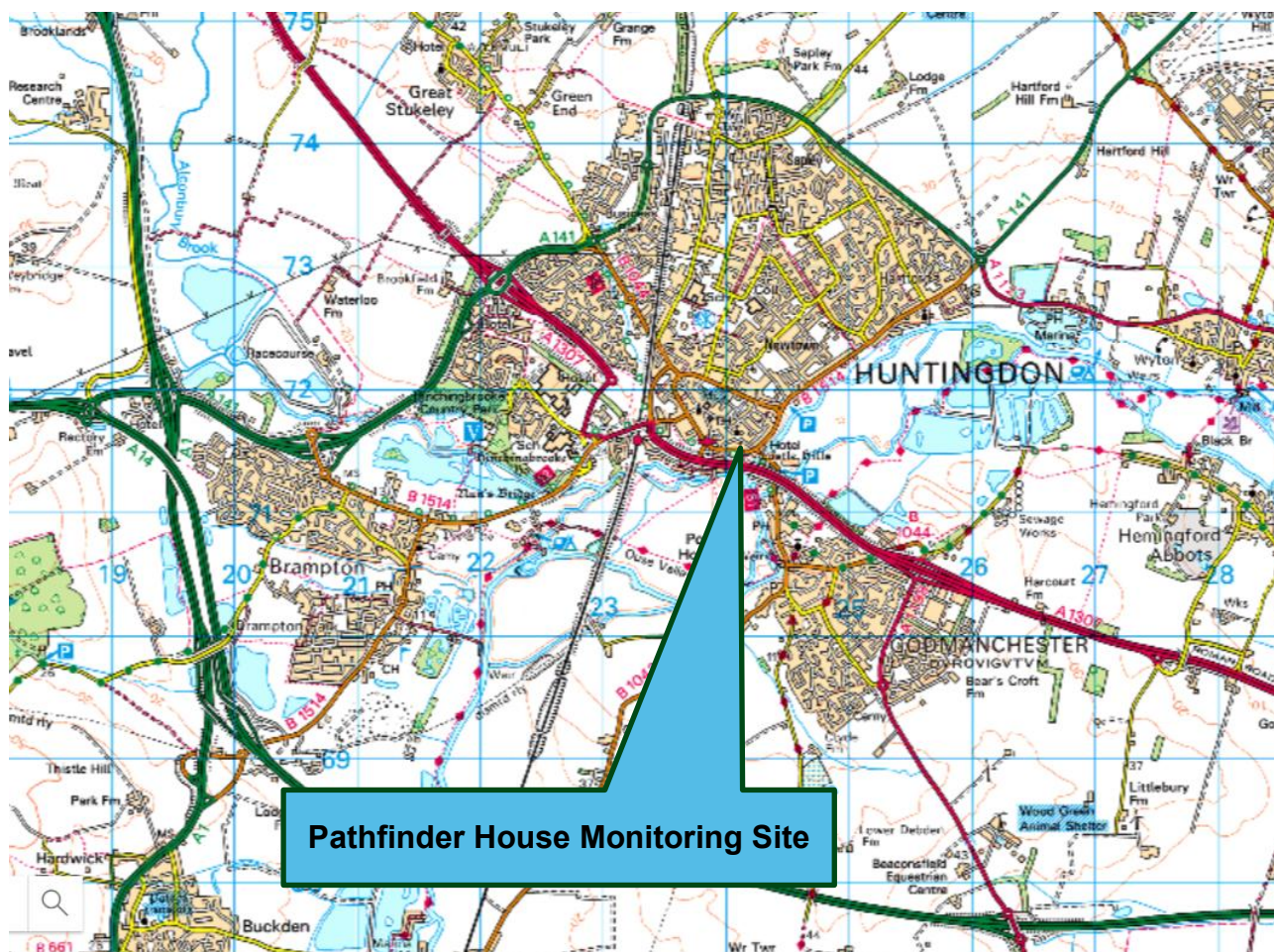

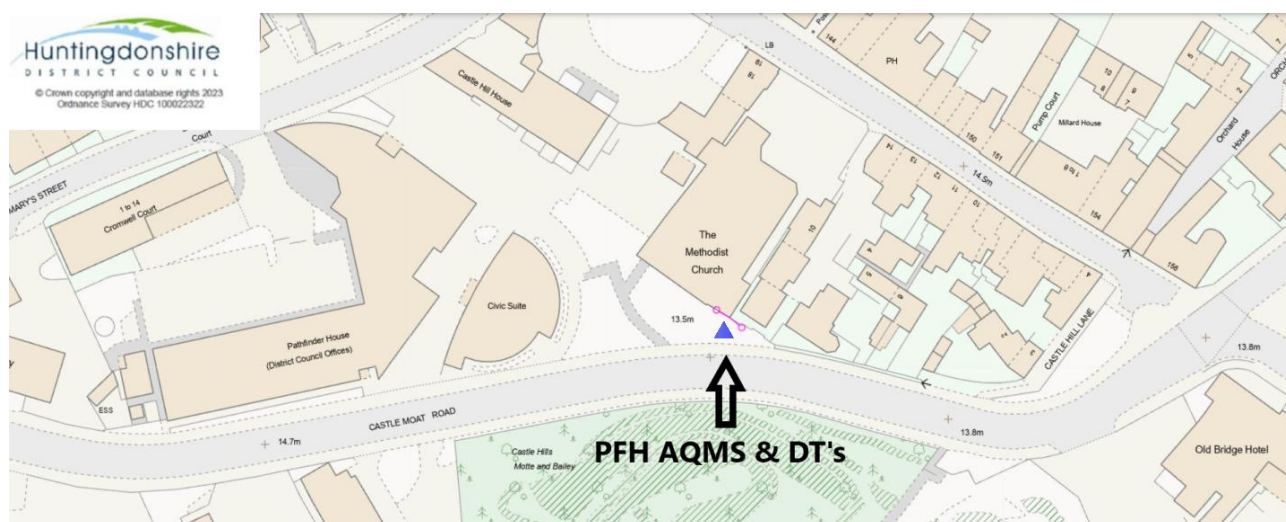
Pathfinder House Monitoring Site

Figure D.8 – Map of the Automatic NO₂, PM₁₀ and PM₂.₅ and PFH diffusion tubes monitoring location:

PFH AQMS & DT's

Appendix E: Summary of Air Quality Objectives in England

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

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

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

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQMS	Air Quality Monitoring Station (Automatic)
ASR	Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by National Highways
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10μm or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5μm or less
QA/QC	Quality Assurance and Quality Control
SO_2	Sulphur Dioxide
TG22	Local Air Quality Management Technical Guidance TG22

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.