



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: 30 June 2025



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Local Responsibilities and Commitment

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- NYC Trading Standards
- NYC Planning Policy
- NYC Climate Action officers
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Executive Summary: Air Quality in Our Area

This is the second combined Annual Status Report (ASR) for the County of North Yorkshire, reporting on Air Quality in the localities of Richmondshire, Selby, Craven, Harrogate, Hambleton, Scarborough, and Ryedale during the 2024 year. The former localities are referenced for continuity with previous reports.

North Yorkshire is a large non-metropolitan county in the North of England, a geographical area, broadly incorporating the historic towns of Harrogate, Richmond, Scarborough, Malton, Skipton, Selby and Northallerton. There are also considerable stretches of deep rurality from the rolling hills of the Yorkshire Dales National Park in the West, through the North Yorkshire Moors National Park, to the unique rugged coastline in the east. With a county population of over 600,000 people (Census 2021) the diverse region of North Yorkshire offers the benefits of beautiful rurality, coastline settings, historical towns, and an excellent quality of life, with easy access to the main national road and rail network.

Air Quality in North Yorkshire

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. In the UK, it is estimated that the reduction in healthy life expectancy caused by air pollution is equivalent to 29,000 to 43,000 deaths a year¹.

Air pollution particularly affects the most vulnerable in society, children, the elderly, and those with existing heart and lung conditions. Low-income communities are also disproportionately impacted by poor air quality, exacerbating health and social inequalities.².

Air quality is compromised when it contains particulate matter, which can include dust, dirt, soot, smoke, and liquid droplets. These emissions are typically emitted from Transport, Waste Management, Industrial Process, and Agricultural soils. Particles less than 10

¹ UK Health Security Agency. Chemical Hazards and Poisons Report, Issue 28, 2022.

² Defra. Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

micrometres in diameter (PM₁₀) pose a health concern, particles less than 2.5 micrometres (PM_{2.5}) in diameter are referred to as 'fine' and pose the greatest health risks because their small size can be inhaled deeply into the lungs and can enter the bloodstream. Air pollution can negatively affect human health through short term (days to weeks) transitory exposure and long-term accumulated exposure (over years to decades) with the latter considered to cause the greater harm.

Overall, North Yorkshire has very few areas of major concern in relation to air quality, with the main source of pollution being from road transport emissions, i.e. nitrogen oxides/ nitrogen dioxide (NO_x/NO₂) and particulate matter (PM₁₀); the primary focus of our monitoring for air pollution being nitrogen dioxide (NO₂). Monitoring focusses on the more traffic congested areas where pollution may affect the population and where necessary there will be targeted measures to address these issues.

As a Council that encompasses the large rurality of the Yorkshire Dales National Park (YDNP) and the North York Moors National Park (NYMNP), there are many areas affected by rotational heather burning within the North Yorkshire Council (NYC) boundary. A public consultation is taking place in the 2025 year on proposed amendments to Heather and Grass Burning Regulations. Whilst this is focused on land management issues, extended protection in peat areas of moorland is likely to reduce the spread of particulate matter created from burning, illustrated in the picture below, which is seen as a positive step towards the improvement of air quality for residents in North Yorkshire.



The major road systems that run the length and breadth of the county include the A1(M), A64, A66, A170, A19 and A59, plus numerous minor roads that encompass the rural and urban areas. The East Coast main line railway also intersects the county, connecting people with the North and the South of the UK. Nitrogen dioxide levels have been the principal focus of monitoring road traffic conditions in 2024 for North Yorkshire. Some urban areas with narrow congested streets, road junctions and canyon-like surroundings

(i.e. buildings close to the road on both sides) have reported elevated NO₂ results in previous years with increasing throughput of traffic.

The Air Quality Standards Regulations (2010) [Nitrogen dioxide \(NO₂\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/legislation/the-air-quality-standards-regulations-2010) require that the annual mean concentration of NO₂ must not exceed **40µg/m³** (40 microgrammes / cubic metre) and that there should be no more than eighteen exceedances of the hourly mean limit value (concentrations above 200 µg/m³) in a single year. Depending on the levels of exceedance of the Air Quality Objective (AQO) in an area an effective and targeted Air Quality Action Plan (AQAP) is formulated to manage and improve the air quality in those areas; with the aim of bringing the AQO back to acceptable levels to protect people's health and the wider environment.

In 2024, North Yorkshire had eight declared Air Quality Management Areas (AQMAs), seven for NO₂ at various towns in the council and one for PM₁₀ in the village of Staithes. In September 2024 a revised combined district AQAP was submitted to Defra which included the recommendations to revoke four of NYC's AQMAs due to continued compliance with the National AQO for the preceding 5 years (or more). The AQAP was subsequently approved by Defra in September 2024 and four of the declared AQMAs were formally revoked on 4th October 2024 and three AQMAs remain for continued monitoring of NO₂ and one for PM₁₀. These are discussed in more detail in section 2.1.

Air Quality in our area is broadly impacted by Agriculture, Military, Distribution, Hotels and Restaurants, Public Administration, Education and Health. NYC are the regulator for over 260 Industrial and commercial permitted sites, including five A2 permitted sites, which tend to be larger more complex operations. The permitting regime facilitates monitoring of potential emissions to air, but also to water, and land for some installation sites. The permitted sites include fuel stations, quarries, dry chemical cleaning processes, concrete block manufacturing, waste incineration and crematoria.

In 2024 the Scientific Team undertook a process to streamline our Permit inspection regime, harmonising the processes, permits and conditions associated with managing environmental permits. This has led to increased efficiency, reduced the regulatory burden and made it clearer for permit holders. This continues through into 2025 in line with [The Environmental Permitting \(England and Wales\) Regulations 2016 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukreg/2016/1222).

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. PM₁₀ refers to particles under 10 micrometres. Fine particulate matter or PM_{2.5} are particles under 2.5 micrometres.

Actions to Improve Air Quality

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

The Environmental Improvement Plan³ sets out actions that will drive continued improvements to air quality and to meet the new national interim and long-term targets for fine particulate matter (PM_{2.5}), the pollutant most harmful to human health. Defra's Air Quality Strategy⁴ provides more information on local authorities' responsibilities to work towards these new targets and reduce fine particulate matter in their areas.

In fulfilment of NYC's responsibilities, we will not be waiting for legal limits to be breached, we will be tackling air quality (AQ) issues through measures in our approved AQAP as well as developing an Air Quality Strategy. Having both, which is not legally necessary, will ensure a more comprehensive and pro-active commitment to tackling air pollution in our area.

³ Defra. Environmental Improvement Plan 2023, January 2023

⁴ Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

The Department for Transport's 'The Road to Zero'⁵ details the Government's approach to reduce exhaust emissions from road transport through a number of mechanisms, in balance with the needs of the local community. This is extremely important given that cars are the most popular mode of personal travel, and the majority of Air Quality Management Areas (AQMA) are designated due to elevated concentrations heavily influenced by transport emissions.

Following the consistent downward trend in air quality issues in the county areas and the revocation of four AQMA, NYC will continue to monitor the remaining three AQMA in relation to NO₂ and one AQMA in relation to PM₁₀ in Staithes. Should any AQMA fall below 10% of the AQO of 40µg/m³ for 3 years or more, we will seek to revoke the AQMA in line with local authority expectations, or sooner if advised to do so by Defra. This is discussed in more detail later in the report under section 2.1.

The main actions for North Yorkshire Council going forwards are summarised as follows:

- Continue to monitor utilising 222 diffusion tubes and 209 locations (due to triplicates).
- Undertake a review of the numbers and locations of diffusion tubes referenced above to ensure they are appropriately sited and representative of air quality issues within the NYC area.
- Streamline and strengthen the environmental permitting regime to limit emissions to atmosphere.
- Install 6 Aeroqual AQS1 air quality monitoring stations across NYC, which will monitor NO₂, CO, PM (PM₁₀, PM_{2.5}, PM₁ and TSP), implement 3 Zephyr monitoring stations to include NO₂, PM (PM₁₀, PM_{2.5}, PM₁ and TSP). This will assist in developing a wider monitoring strategy and provide guidance on the handling, analysis, interpretation, and reporting of air quality monitoring data.
- As a consultee of the planning regimes for NYC (North Yorkshire Council), YDNP (Yorkshire Dales National Park) and NYMNP (North Yorkshire Moors National Park), we will continue to influence the reduction of air pollution through planning conditions, influence the content of developing policy within the NYC, through the

⁵ DfT. The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy, July 2018

promotion of sustainable transport, green construction techniques and air quality monitoring.

- Development of a new North Yorkshire Local Plan is being prepared to guide development and conservation in the area until 2045, with the exclusion of the North York Moors and the Yorkshire Dales National Parks. This Plan will replace former district authority area plans, which currently remain in place until the new Local Plan is formally adopted. NYC will be inviting views on future growth and development priorities through a consultation during 2025. To be reported on in future ASRs.
- Continue to champion air quality issues within North Yorkshire Council, using the Air Quality Steering Group as a platform for collaboration with stakeholders to support more strategic alignment.

Conclusions and Priorities

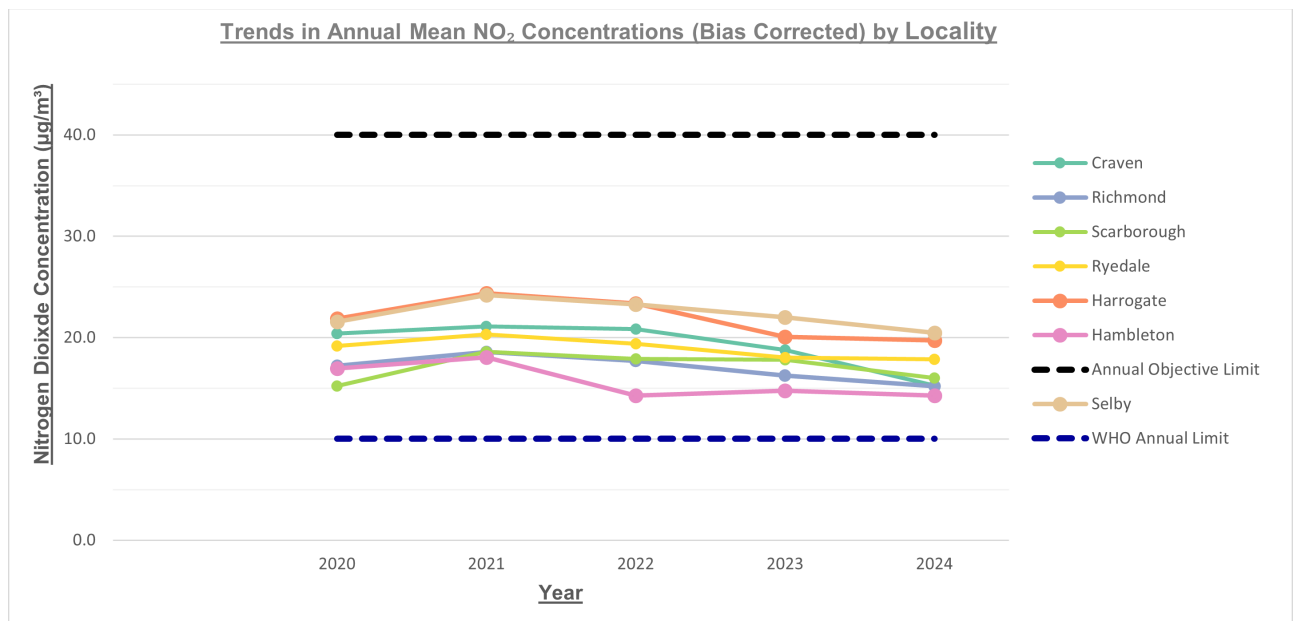
This report provides the results of the monitoring of nitrogen dioxide (NO₂) concentrations over the past 5 years. The NO₂ annual mean concentrations are compared to the AQO of 40µg/m³ for England.

The annual mean objective of 40µg/m³ for England was not exceeded at any of the NYC monitoring points in 2024. There continues to be a steady decrease in annual concentrations consistent with an overall predicted downward trend for the majority of locations.

The highlights are:

- The approval of the AQAP in September and subsequent revocation of four AQMAs in November 2024 has been a noteworthy achievement this year. NYC plan to update the AQAP to reflect the revocation changes in the coming year, once the 2025 ASR has been approved.
- NYC will also review the remaining AQMAs in NYC that have achieved 5 years consecutive compliance with the AQO and consider revocation accordingly. No further AQMAs have been declared.
- NYC will continue to review and assess local air quality across North Yorkshire and to fulfil our legal obligations. We will consider the WHO air quality guidelines and how we might work harder towards these in the coming years; to be reported on in future ASR's and in an updated AQAP later this year.

- The following graph illustrates our achievements over the last 5 years and how NYC's annual mean monitoring data compares with the UK AQO of $40\mu\text{g}/\text{m}^3$ and the WHO Global Air Quality Guidelines ([WHO Global Air Quality Guidelines](#)) ultimate limit of $10\mu\text{g}/\text{m}^3$. Whilst the WHO guidelines represent very ambitious targets, like many other Councils, we endeavour to work hard towards the WHO limit. In pursuit of AQ improvements in North Yorkshire we are already below the first interim target of $30\mu\text{g}/\text{m}^3$ set by WHO, across **all** areas.



- Reviewing all monitoring locations over the next two years, reduce and/or relocate as required.
- NYC have brought together our diffusion tube network and selected one supplier contractor for the coming year of 2025 with Socotec.
- NYC is to develop an AQ Strategy paper which will outline a plan to further improve air quality, setting air quality standards, objectives, and measures to reduce pollutants. It will be a framework for NYC to take action and address local air quality goals.
- Reviewing development schemes and improvement works to ensure there are no air quality concerns in neighbourhood planning and land use.

How to get Involved

Members of the public are encouraged, through the NYC website, local community programmes and campaigns to get involved by reducing the number of car-driver trips, through car sharing, increased use of public transportation, and promoting the increase of active travel alternatives, such as cycle and walking.

North Yorkshire annually promotes information about Clean Air Day and Clear Air Night alongside Public Health to raise awareness and understanding of the impacts of air pollution and the health benefits of good air quality. Local schools are encouraged to get involved using Clean Air Day resources for schools and think about air pollution and the impacts in their daily lives. [Clean Air Day | Action for Clean Air](#)



Electric Vehicle Charge Points (EVCPs) continue to be installed in council-run car parks across the wider North Yorkshire area as part of the 2030 net-zero plans.

The Public consultation process on local planning, permitting, transport plans and other regulatory work gives a transparent view and process for the public to get involved, feel part of, and contribute to decision making.

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1 Local Air Quality Management

This report provides an overview of air quality in the North Yorkshire Council (NYC) area 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 NYC 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 (AQMA) 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 AQMA declared by NYC can be found in Table 2.1. The table presents a description of the four AQMA that are currently designated within the North Yorkshire Council area.

Appendix D: Map(s) of Monitoring Locations and AQMA provides maps of AQMA and the air quality monitoring locations in relation to the AQMA. The air quality objectives pertinent to the current AQMA designations are as follows:

- NO₂ annual mean
- PM₁₀ 24-hour mean

As stated in the Technical Guidance LAQM.TG22, the revocation of an AQMA should be considered if pollutant levels fall below the UK national air quality objective (AQO) levels for a period of 3 consecutive years of compliance with the relevant objective, as evidenced through monitoring and/or modelling. As such, there should not be any declared AQMA for which compliance with the relevant objective has been achieved for a consecutive five-year period.

In 2023 NYC inherited eight declared AQMA, seven for NO₂ and one for PM₁₀, we set out our plans and reasoning to revoke four of these AQMA during 2024 in the Councils Air Quality Action Plan (AQAP). [Local air quality management | North Yorkshire Council](#)

Four AQMA were approved for revocation and four AQMA remain with details in Table 2.1 below.

We do not propose to declare any new AQMA in the NYC area as there are no exceedances of the NO₂ annual mean/PM₁₀ 24-hour mean air quality objectives (see

appendix A: monitoring results). There are no anticipated changes in sources or levels expected in any other areas of NYC.

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
AQMA 1 Knaresborough AQMA No. 1 Bond End, Knaresborough	Declared 26 November 2010	NO ₂ Annual Mean	The Royal Oak, 1-23 Bond End and 104-138 High Street, Knaresborough	No	53.6	Not exceeded 30.3	5 years	NYC AQAP Sept 2024	Local air quality management North Yorkshire Council
AQMA 2 Harrogate AQMA No. 1 Order 2017 Wetherby Rd, Harrogate	Declared 4 October 2017	NO ₂ Annual Mean	The Flat above 110 Wetherby Road	No	46.4	Not exceeded 27.7	6 Years	NYC AQAP Sept 2024	Local air quality management North Yorkshire Council
AQMA 6 AQMA No. 1 New Street, Selby	Declared 29 February 2016	NO ₂ Annual Mean	An area encompassing a section of New Street and several properties flanking the road between Selby Abbey and the junction with Ouse Gate.	No	55	Not exceeded 37.7	3 years	NYC AQAP Sept 2024	Local air quality management North Yorkshire Council

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
AQMA 8 Scarborough AQMA	Declared 1 August 2004, Amended 29 August 2018 (reported on UK-AIR)	PM ₁₀ Annual Mean	The majority of the village of Staithes	No	n/a Affected by salt crystals	No data	6 years minimum	NYC AQAP Sept 2024	Local air quality management North Yorkshire Council

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

☒ North Yorkshire Council confirm that all current AQAPs have been submitted to Defra.

2.2 Progress and Impact of Measures to address Air Quality in North Yorkshire Council

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

- Based on evidence provided by NYC, the conclusion in the report were accepted for all sources and pollutants. The first combined ASR 2024 for NYC was accepted at first submission.
- Any formatting or administrative issues raised in the appraisal have been addressed this year. Clarification of AQMA naming convention, ensuring consistency with other tables in the report.
- Additional monitoring and mitigation measures should be considered within AQMA 6 (Selby) to reduce NO₂ concentrations in this area. This was reviewed in the AQAP submitted in Sept 2024 and further actions and measures are also discussed in this year's ASR – see measures Table 2.2 where a town regeneration project is underway.
- Mapping and illustrating the boundaries of the AQMAs was suggested by Defra to further clarify the areas affected. This was addressed at submission of the AQAP and within the maps illustrated in the current ASR.
- NYC have outlined their actions that will be taken to improve air quality in NYC between 2024-2029 in the draft AQAP (as of June 2024) covering all declared 8 AQMAs. This has now been updated, and a final NYC AQAP submitted and approved by Defra going forward over the next 5 years; to include revocations of four AQMAs in September 2024, this also addresses the advice to comply with the LAQM Technical Guidance 2022 in the respect of compliance with the AQO.
- NYC 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 11 measures, completed, in progress or planned are set out in Table 2.2. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2.
- Strengthened criteria for AQAPs under the Environment Act 2021 is recognised and has been adhered to in the approved AQAP 2024-2029.

- It has also been noted that all tiers of government are now required to collaborate to address exceedances of Air Quality Objectives, this includes County Councils, Mayors and combined authorities, such as, NYC and West Yorkshire Combined Authority (WYCA), where relevant. NYC have established an AQ Steering Group which includes stakeholders from all areas of NYC and any other external parties directly responsible, or not, for the source of emissions to atmosphere. This forum regularly meets on a 3 monthly basis to collaborate on complementary issues, policy and plans affecting air quality.

More detail on these measures can be found in their respective Action Plans; this includes the NYC AQAP 2024-2029. [Local air quality management | North Yorkshire Council](#)

An Air Quality Strategy combining the direction and approach for NYC unitary and combined authority body is in discussion, to be finalised and adopted in 2028 which will reflect a framework for the improvement of air quality in our district. This will need to complement the priorities of the new Mayoral Combined Authority with York under mayoral command which includes building more healthy and resilient communities.

There will be several local measures that will continue to be worked on in the former district areas of NYC.

Completed measures from 2024 are:

- Measure 1 – Junction improvements and traffic management changes contributed to the reduction in vehicle emissions and the revocation of AQMA 1 in Bedale.
- Measure 11 – Clean Air Day Campaign 2024 was successful in raising the importance and awareness of Air Quality in our district and amongst local schools.
- Completed and approved AQAP, consolidating all previous AQAPs across seven former district areas.
- Revocation of four AQMAs across NYC; a clear demonstration of continued improvements in air quality in North Yorkshire.

North Yorkshire Council expects the following measures to be completed over the course of the next reporting year:

- Implementation and monitoring of a broader set of pollutants across NYC utilising the real-time AQ monitors.
- Consolidation of diffusion tube contracts making management easier and more effective.

North Yorkshire Councils priorities for the coming year are:

- Continue to review and assess local air quality across North Yorkshire and to fulfil our legal obligations.
- Improve working with stakeholders to influence policy, strategy and guidelines, such as planning to integrate necessary air quality considerations and supplementary guidance for AQ (PM_{2.5}) damage costs.
- AQAP to be reviewed to reflect AQMA changes and updated actions that affect the plan.
- Schemes and monitoring of broader pollution levels through AQ monitoring project; this may be expanded to help inform public on the state of AQ in our areas.
- Discussions are taking place to integrate air quality with school climate action plans. To include anti-idling campaigns.
- AQ drop-in sessions for the public have been arranged for next year to be incorporated into Clean Air Day 2026.
- Reviewing development schemes and improvement works.

North Yorkshire Council worked to implement these measures in partnership with the following stakeholders during 2024:

- NYC Transport and Highways Department
- Public Health
- Environment Agency
- Yorkshire and Lincolnshire Pollution Advisory Group (YALPAG) who is instrumental in aligning good practice across all member council areas for air quality.

The principal challenges and barriers to implementation that North Yorkshire Council anticipates facing are:

- Budgetary constraints and funding
- The York and North Yorkshire Combined Authority Mayoral initiatives; broader and cross-level agendas yet to be established
- Resources

Progress on some measures have been slower than expected due to the re-organisation of the unitary authority divisions, competition for resources and re-prioritisation of projects.

North Yorkshire Council anticipates that the measures stated above and in Table 2.2 will contribute to compliance in all AQMAs.

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	Transformation Scheme - Strategic Improvements in towns of Harrogate, Selby, and Skipton)	Traffic Management	Strategic highway improvements, Re-prioritising Road space away from cars, including Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	2024	2028	North Yorkshire Council (NYC), Highways, West Yorkshire Combined Authority (WYCA)	Department for Transport and Transforming Cities Fund, NYC, WYCA	Funded	£44.6m	Implementation in Skipton and Selby, Harrogate currently in planning stage	Improved traffic efficiency, reduce idling, implement sustainable transport options	Traffic counts, AQ monitoring, user satisfaction increased, reduced vehicles and emissions output, EV infrastructure and increased walking and cycling options-providing better links to transport across towns.	March 2024 Business case approved, Skipton construction March 2025, estimated completion December 2025. Selby construction to start august / Sept 2025, completion 2028.	Legal Challenges, public opposition, resources, funding and timescales.
2	Encouraging the use of Electric Vehicles (EV) by providing public charging points	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2019	2028	NYC, highways, street lighting, town councils.	NYC/ Gov funding/ private investment	Part funded	£100k - £500k	Implementation	Reduction in vehicle emissions	Overall, there is a target to install 3000+ 7-22kW charging sockets, to be installed by Summer 2028	Development and trial of cross pavement charging underway to help with community charging options on street and at home. roll-out of public charging network out to tender. Electric vehicle charging North Yorkshire Council	Barriers relate to funding, suitable electrical infrastructure, geography, and resources. There has also been activity from the private sector in the last year with supermarkets, such as Sainsbury's, rolling out their own rapid charging network and Zest and Osprey investing in their rapid charging in North Yorkshire, utilising both NYC and private investment.
3	Provision of Air Quality Information - Air Quality Campaigns and Education - signposting information on walking and cycling groups and other community groups and projects	Public Information	Via Leaflets, social media, NYC Web Site, Advertising	2024	ongoing	NYC, Environmental Health, Public Health, Schools, Community Groups, Members	NYC	TBC		On-going	Reduce NOx emissions from reducing vehicle use and promoting sustainable travel options, anti-idling campaigns	AQ Monitoring, sign-up rate and community campaigns	Local Cycling and Walking Infrastructure Plans (LCWIPs) North Yorkshire Council	Resources, funding, Policy and Guidance
4	Local Transport Plan 4 (LTP4)	Policy Guidance and Development Control	Other policy	2016	2040	NYC	NYC	n/a	n/a	In Planning	Reduction of traffic emissions	TBC	TBC	The LTP will be updated and replaced in the next 12-18 months with a joint local transport Plan for York and North Yorkshire.

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
5	Streamlining Environmental Permit Inspections	Environmental Permits	Measures to reduce pollution through more thorough PPC Permits Inspections	2024	2026	NYC, Regulatory Services (Scientific), Operators	NYC	Funded	£10k	In Implementation	Reduced emissions from tighter controls and regular testing and reporting	Risk Assessments/ Compliance with conditions of Permits.	Implementation on-going	Resources and timescales/co-operation from Operators
6	Taxi Inclusive Service Plan and General Policy Review	Promoting Low Emission incentives	Taxi emission incentives and licensing conditions	2024	2030	NYC, Licensing, Executive Members	NYC	Funded	TBC	In planning	Hackney Carriage and Private hire/wheelchair access vehicle or zero emission vehicle	Adoption and numbers of vehicles compliant by 2030	Consultation completed April 2025	Economic challenges /Adoption numbers
7	Enforcement of the Air Quality (domestic Solid Fuel Standards) (England) Regulations 2020	Public Information	Via the internet	2023	2040	NYC – Trading Standards – Env. Health / DEFRA	NYC	n/a	n/a	Implementation		Enforcement numbers	In Progress	All sellers identified in NYC area. Continued advice during 2024/25 to achieve compliance for sellers and the General Public. A review will then take place on any non-compliance and (subject to funding) a test purchase prog. undertaken, with a view to escalation of formal action.
8	Clean Air Day	Public Information	Via Leaflets, social media, NYC Web Site, Advertising	2024	2025	NYC/Public Health/ Scientific Team/Schools/Community Groups	NYC	Funded	< £10k	In plan/ 19 th June 2025		Sign up rate/ public awareness	In plan/Annual Event	Resources
9	Replacing conventional NYC fleet vehicle with EV/other alternatives.	Promoting low emission transport	Company vehicle procurement/ conversions	2019	2040	NYC	NYC	Part funded	>500k	In Progress	TBA	Staff mileage reduction, reduced emissions from ICE's / cost savings	Development of a rapid charging strategy to better support enroute fleet charging. As well as a study reviewing options for fleet vehicle replacement with low carbon transport options, which is due to conclude in September. Project/study to consider green hydrogen options for larger fleet vehicles.	Funding, geography, infrastructure limitations
10	Adopted Local Plan for North Yorkshire	Policy Guidance and Development control	Air quality planning and policy guidance	Sept 2024	Adoption 2028	NYC, Third Parties, Public, City of York Council, North York Moors National Park, Neighbourhood Councils, Public	NYC	TBA	TBC	In Consultation	TBA	Adoption	Call for sites for the North Yorkshire Local Plan North Yorkshire Council The North Yorkshire Local Plan North Yorkshire Council	Legal Challenges, resources, (people and space), uncertainty, Policy, Funding,
11	Air Quality Strategy	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2025	2028	NYC - Public Health, Environmental Health	NYC	n/a	n/a	In planning	TBA	TBA	In Plan	

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 Strategy⁶, local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter (PM_{2.5}). There is clear evidence that PM_{2.5} (particulate matter smaller 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases. The UK Governments annual mean concentration target for the end of 2040 for PM_{2.5} is 10µg/m³ and this is not to be exceeded at any monitoring station.

North Yorkshire Council is taking the following measures to address PM_{2.5}:

- The NYC website provides residents with information on stoves, open fires, and seasoned wood, as these have been identified as an increasing source of PM_{2.5} across the country. There are several smoke control areas in the NYC area, covering parts of Harrogate, Selby and Skipton, and the villages of South Milford, Sherburn in Elmet, Tockwith, Thorpe Willoughby, Cross Hills and Sutton in Craven. The smoke control areas have been in place for some time, but this enables proactive monitoring and enforcement action, should a breach of the smoke control legislation be identified. No warning letters or penalty fines were issued by NYC in 2024 for smoke control violations.
- Defra are currently looking for additional locations in England to enhance national air quality monitoring, to increase the evidence base for PM_{2.5}. Locations in Harrogate and Scarborough were being considered; Harrogate has since become operational.
- Continuous PM_{2.5} monitoring has been carried out by some neighbouring councils such as City of York Council, Leeds City Council, Stockton Borough Council and Middlesbrough Council. The monitoring has shown annual averages for 2024 ranging from 6.81 to 8.89µg/m³. Continuous PM_{2.5} monitoring is also carried out at a rural background site at High Muffles in the Ryedale area of Stape, and in 2024 the concentration recorded was 4.65 µg/m³. Concentrations in North Yorkshire could

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

therefore be reasonably expected to be under $8.0\mu\text{g}/\text{m}^3$, with concentrations potentially as low as $4.65\mu\text{g}/\text{m}^3$ in some rural areas. This strongly suggests that the levels in the NYC area already meet the 2040 target.

- NYC has been working on a project to install real-time monitors at strategic locations across our locality. Current progress includes the installation of 3 EarthSense Zephyrs at Station Parade Harrogate, Bond End Knaresborough and the village of Staithes in Scarborough. A further six Aeroqual AQS1 monitors are in the process of being installed in Northallerton, Malton, Richmond, Harrogate, Selby and Whitby. Once up and running the monitors will provide real time data on $\text{PM}_{2.5}$, PM_{10} , NO_2 , SO_2 which will provide data and better understanding on these pollutants in our area.

The Public Health Outcomes Framework (PHOF), a department of Health data tool for England intended to focus public health action on increasing health life expectancy and reducing differences in life expectancy between communities, uses indicators to assess improvements. Due to the significant impact that poor air quality can have on health, the PHOF includes an indicator relating to $\text{PM}_{2.5}$. This is PHOF indicator D01 Fraction of mortality attributable to particulate air pollution (new method).

Estimates of mortality in England (2023 data) range from 3.3% (Isles of Scilly) to 7.4% (City of London). For the North Yorkshire Unitary Authority, the indicator value is 4.2%, which is lowest in the Yorkshire and Humber region. The average for England is 5.8%.

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

This section sets out the monitoring undertaken within 2024 by North Yorkshire 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

North Yorkshire Council does not undertake automatic (continuous) monitoring at any of our locations. Further information about monitoring networks and other resources about air pollution are available on the Defra UK AIR website found here: [Home - Defra, UK](#)

3.1.2 Non-Automatic Monitoring Sites

North Yorkshire Council undertook non-automatic (i.e. passive) monitoring of NO₂ at 209 sites, using 222 diffusion tubes during 2024. Table A.1 in Appendix A presents the details of the non-automatic sites. There were no co-located diffusion tube sites. A national bias adjustment factor (0.84) was used to calculate the annual mean ($\mu\text{g}/\text{m}^3$) for 71 diffusion tubes that were analysed by Gradko with a method of 20% TEA in Water. A national bias adjustment factor (0.78) was used to calculate the annual mean ($\mu\text{g}/\text{m}^3$) for 151 diffusion tubes that were analysed by Socotec. No local bias adjustment factor was used.

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

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, annualisation (where the annual mean data capture is below 75% and greater

than 25%), and distance correction. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO₂)

There are no exceedances of the air quality objectives for NO₂ in any of the diffusion tube locations, inside or outside of AQMAs. The monitoring data for 2024 has led us to review two AQMAs where the data reported has presented compliance with the AQO's for a number of years. AQMA 1 (Bond End, Knaresborough) has achieved compliance with the objective of 40µg/m³ for five years, but not more than 10% below the objective for 3 years. AQMA 2 (Wetherby Road, Harrogate) has achieved compliance for 5 years and has more than 3 years at more than 10% below the objective; currently under review for revocation.

Table A.2 in Appendix A compares the ratified and adjusted monitored NO₂ annual mean concentrations for the past five years with the air quality objective of 40µg/m³. Note that the concentration data presented represents the concentration at the location of the monitoring site, not at the receptor, 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. Please note that the concentration data presented in Table B.1 includes distance corrected values, only where relevant.

This commentary mostly relates to the monitoring results for nitrogen dioxide (NO₂). Commentary is also given in relation to PM₁₀ connected with the AQMA in **Staithe**. The results for all monitoring sites are below the annual AQO of 40µg/m³ for NO₂.

NB. Annual mean concentrations of less than 60µg/m³ are also unlikely to have breached the hourly mean AQO.

Most monitored sites have shown a general downward trend of NO₂ values over the last 5 years (See Table A.2). This will partly have been due to improvements in traffic flow combined with the increasing numbers of electric vehicles on the roads and the start-stop technology on modern vehicles, combined with the impact of the Covid lockdown(s) and changing working habits (working from home (WFH)); although summary statistics by the Department for Transport suggest a rising return to pre pandemic levels of vehicles on the roads.

The majority of monitoring sites analysed during 2024 will continue for 2025, although the numbers and locations of monitoring sites across the NYC area will be reviewed during 2025 to ensure optimal placement and better monitoring of targeted intervention areas. At the beginning of 2025 NYC consolidated diffusion tube suppliers to provide consistency across reporting and simplify the management of contracts.

3.2.2 Particulate Matter (PM₁₀)

NYC have not monitored particulate matter (PM₁₀) within or outside of AQMAs over previous years. As part of the monitoring required within the AQMA for Staithes, monitoring at this AQMA was re-instated for PM₁₀ during 2025, to gather sufficient data to provide a case for revocation of the AQMA; this was previously declared in relation to the burning of domestic solid fuel for primary heating. However, since 2018 the housing association in the AQMA area has undertaken a timely update of heating systems, moving to electric, so it is anticipated that this will have had a significant positive impact on air quality in the area. Following Defra's request to clarify the AQ standards in this AQMA, NYC have implemented a real-time EarthSense Zephyr monitor and will report on the AQ standards in the next ASR. Although the Zephyr being used does not conform to the European Reference Method Standards, the monitor is MCERTS accredited for particulates and will give a good indication of the levels present with the AQMA. To be reported on in the next ASR.

3.2.3 Particulate Matter (PM_{2.5})

NYC did not monitor particulate matter (PM_{2.5}) within or outside of AQMAs during 2024, however, a project to implement real-time AQ sensors at strategic points across the district will give us additional data on various pollutants, filling the gaps where diffusion tubes cannot provide equivalent data. Whilst the low cost AQ sensors do not comply with the European reference method, it will provide a useful indication of levels and trends of pollutants.

3.2.4 Sulphur Dioxide (SO₂)

NYC are not currently monitoring Sulphur Dioxide (SO₂) within or outside of AQMAs.

3.3 District Diffusion Tube Round-up

The following is a summary of the 2024 diffusion tube monitoring results for nitrogen dioxide (NO₂) in each of the key district areas of North Yorkshire Council.

Selby Locality

The Air Quality Management Area #6 (AQMA No. 1 New Street, Selby) as seen in Table 2.1 remains in place, declared due to transport related sources of pollution. Whilst all the monitored levels report concentrations below the AQO of **40µg/m³**, not all locations achieve levels of 10% below the objective (**36µg/m³**), as required.

The concentrations at all locations within the Selby AQMA have decreased in 2024. The highest recorded concentration remains at a triplicate monitoring location S7 (21 new Street), with a concentration of 37.7µg/m³, which has still reduced from previous levels but is above the required 10% below the AQO. The majority of locations were below 30µg/m³, with only 2 above 30µg/m³, S7 and S4).

Significantly, there were no increases in concentrations of NO₂ at any other monitoring location in the Selby area, which is an improvement on the previous year's results.

Measure 1 in table 2.2 highlights the interventions that are underway to address the town regeneration and strategic highway improvements in Selby which re-prioritising of road space away from car use, including access management, selective vehicle and bus priorities and high vehicle occupancy lanes. This is expected to have a positive effect on improving traffic flows in the town, which plays a crucial role in reducing the pollutant levels in the AQMA. To be reported on in more detail in the 2026 ASR.

Richmond Area

There are no declared AQMAs in this area. Most tube monitoring locations within the Richmond study report decreased concentrations of NO₂, except for diffusion tubes R12, R13, and R18, which line the junction of Maison Dieu and Darlington Road. This location has seen multiple road works and associated traffic lights during 2024 which causes a backup of queuing traffic at busy times of the day.

The highest annual mean recorded for Richmond was at R11, 7 Gallowgate, with a concentration of 20.9µg/m³ – also closely located near the above referenced tube locations in Maison Dieu and affected by the ongoing roadworks and 3-way traffic light system. This road is classically canyon like with a narrow single carriageway uphill section

of the town. Results in 2024 are still a decrease of more than 9% when compared to 2023 monitoring.

Harrogate Locality

AQMA1 (Table 2.1): AQMA (No.1) (Bond End), **Knaresborough**

The concentrations in this AQMA are more than 10% below the AQO of $40\mu\text{g}/\text{m}^3$ for all monitoring locations. The highest level recorded was at H13 with a concentration of $30.3\mu\text{g}/\text{m}^3$. Concentrations have decreased at all monitoring locations within the AQMA during 2024.

This AQMA has now achieved compliance with the AQO of $40\mu\text{g}/\text{m}^3$ for five consecutive years, however, there have only been 2 years where all diffusion tube locations have been more than 10% under the AQO ($36\mu\text{g}/\text{m}^3$). We propose to monitor for another year and will review the 2025 results prior to making any decision about revoking the AQMA.

AQMA2 (Table 2.1) AQMA (No.1) (Wetherby Road) **Harrogate**

Concentrations at tube locations in this AQMA remain 25% below the AQO of $40\mu\text{g}/\text{m}^3$, so below $30\mu\text{g}/\text{m}^3$. This is the sixth year that there have been no exceedances of the annual mean objective for NO_2 and 5 years compliance with 10% below the AQO. We therefore propose to revoke this AQMA.

In 2024 North Yorkshire Council revoked two AQMAs at Low/High Skellgate, Ripon (AQMA3) and York Place, Knaresborough (AQMA4). Diffusion Tube Monitoring in these areas continue, however. Concentrations in both former AQMA's remain 30% below the AQO.

NO_2 concentrations in the remainder of the Harrogate area decreased at the majority of locations, there were five monitoring points at which concentrations increased.

Ryedale Locality

In 2024 North Yorkshire Council revoked the AQMA at Malton (AQMA7). Monitoring in these areas has continued with a continued restriction on HGV vehicles in the area. Concentrations remain 35% below the air quality objective.

The highest bias adjusted annual mean concentration for 2024 was measured at RYE9 Yorkersgate at $25.6\mu\text{g}/\text{m}^3$.

Concentrations in 2024 decreased at 13 monitoring locations within the Ryedale network from the 2023 results, and increased at 9 monitoring locations, with 8 locations increasing by less than 5%. RYE9 Yorkersgate saw an increase of 17.3% from $21.8\mu\text{g}/\text{m}^3$ in 2023 to

25.6 $\mu\text{g}/\text{m}^3$. This is still lower than the 2020, 2021 and 2022 concentrations at RYE9 which were 26.8 $\mu\text{g}/\text{m}^3$, 26.3 $\mu\text{g}/\text{m}^3$, 26.1 $\mu\text{g}/\text{m}^3$ respectively.

Craven Locality

There are no AQMAs declared in this area and no significant issues to report with the twelve diffusion tubes monitoring NO_2 in this area.

The highest annual mean result, bias adjusted for 2024 was at C5 (Crosshills) recording 21.4 $\mu\text{g}/\text{m}^3$ which is a reduction of 0.1 $\mu\text{g}/\text{m}^3$ from 2023.

Hambleton Locality

There are no AQMAs declared in this area, and concentrations have decreased at the majority of locations within the study. Where some NO_2 concentrations have increased these are in isolated monitoring locations, there is no one cluster area that has an increase at all diffusion tube sites. The highest concentration has been recorded at HDC34, Westgate, Thirsk with a concentration of 26.3 $\mu\text{g}/\text{m}^3$.

Monitoring for HDC3 Bankhead Road, Northallerton was discontinued from June 2024; this was reporting consistent low levels and unnecessary.

A new monitoring tube HDC70 was located at The Crossings, Northallerton from August 2024 due to concerns about standing traffic caused by rail traffic interrupting road activity and confining roundabout locations in the area and social housing adjacent to the roadside.

In 2024 North Yorkshire Council revoked the AQMA at Bedale (AQMA5). Monitoring in this area continues. Concentrations remain at less than 43% of the objective.

Scarborough Locality

AQMA8 (Table 2.1) Staithes

As part of the Air Quality Action Plan, NYC has re-visited the AQMA within the village of Staithes for the previous exceedance of the annual mean objective for PM_{10} . Following discussion with Defra and the LAQM officers it was recommended that we re-instate the monitoring of particulate matter (PM_{10}) to report on and evidence that pollution control measures in this area (in relation to Solid Fuel use) have been effective. The AQMA remains in place, and monitoring commenced using an EarthSense Zephyr in February 2025.

Diffusion tube monitoring and NO₂ concentrations have decreased at all locations within the Scarborough study. SC14, Strawberry Court, recorded the highest concentration at 25.6µg/m³.

Absent Data and Tubes across NYC

There has been some absent data for some diffusion tubes for one or more months (often due to weather conditions, tampering, missing lampposts and/or brackets). This is evidenced in Table B.1; in these cases, however, this has had a negligible effect on the overall data captured.

For the 2024 monitoring period there were:

- 40 diffusion tube locations that were missing one month of data (HDC5, HDC61, HDC34, HDC30, RYE123, RYE5, RYE9, RYE13, RYE17, RYE19, RYE24, H5, H8, H10, H14, H18, H27, H44, H47, H62, H67, 3N, S1, S11, S29, S32, S34, S30, S23, S24, C4, C12, SC1, SC3, SC4, SC5, SC6, SC12, SC25, SC27).
- 12 locations were missing two months of data (RYE7, H23, H25, H50, H51, 9N, S6, S5c, S27, S35, SC21, SC22).
- 9 locations were missing three months of data (H2, H16, H26, H53, 4N, S5a, S7c, SC8, SC10).
- 4 tube locations were missing 4 months of data (H63, S10, S33, SC19).
- 1 tube location was missing 6 months of data (S5b).

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

In the Hambleton and Ryedale areas the monitoring results from December 2024 appeared to be inconsistent with normal monitoring patterns (extremes of concentrations). Following discussions with other local authorities and Defra the whole month has been excluded from the study. There are other occasions throughout the year where anomalous figures have been removed.

New/Discontinued Tube Locations:

A new diffusion tube location has been established for 2024, namely HDC69 located at 1 Foundry Way, Leeming Bar, which will assist in monitoring increased traffic emissions due to a new supermarket planned for this area. Another diffusion tube location was established in 2024, namely HDC70 at the Railway crossing at Northallerton, which will monitor traffic emissions due to barrier down time and any resultant potential congestion.

Additionally, two new monitoring locations were added in 2024 located on The Stray, Wetherby Road, Harrogate (H70) where Highways are proposing to install a Toucan Crossing and the other on The Stray, close to Oatlands Drive, Harrogate (H71) where Highways are proposing to install a Tiger crossing to assist with pedestrian crossings as part of the active plan. Only seven months data has been collected for monitoring location H70 and six months data for H71, so these results have been annualised.

The locations of these diffusion tubes are shown in Appendix D.

Appendix A: Monitoring Results

Table A.1 – Details of Non-Automatic Monitoring Sites

Diffusion Tube ID Key:

R – Richmondshire, HDC – Hambleton, RYE – Ryedale, H – Harrogate, S or N – Selby, C – Craven, SC – Scarborough

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)
R2	Queens Road Roundabout	Roadside	417180	501125	NO ₂	No	8.0	1.8	No	2.5
R3	Darlington Road	Roadside	418066	501490	NO ₂	No	22.0	1.4	No	2.6
R4	White Rose Crescent	Urban Background	418504	501455	NO ₂	No	11.0	1.7	No	2.5
R6	Gatherley Moor Farm	Roadside	419207	506509	NO ₂	No	0.0	8.0	No	2.0
R8	15 Queens Road	Roadside	417179	501127	NO ₂	No	7.0	2.4	No	2.8
R10	Oglethorpe	Roadside	417381	501281	NO ₂	No	1.7	1.7	No	2.7
R11	7 Gallowgate	Roadside	417377	501317	NO ₂	No	0.0	3.3	No	2.7
R12	1 Anchorage Hill	Roadside	417542	501275	NO ₂	No	3.5	1.8	No	2.7

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)
R13	3 Maison Dieu	Roadside	417536	501258	NO ₂	No	0.0	1.4	No	2.7
R15	2 Maison Dieu	Roadside	417500	501263	NO ₂	No	0.0	1.6	No	2.8
R16	74 Frenchgate	Roadside	417451	501269	NO ₂	No	0.0	1.5	No	2.7
R17	95 Frenchgate	Roadside	417370	501262	NO ₂	No	2.0	1.5	No	3.0
R18	26 Darlington Road	Roadside	417661	501297	NO ₂	No	3.5	1.7	No	2.7
R19	43 Frenchgate	Roadside	417312	501037	NO ₂	No	0.0	1.8	No	2.7
R20	16 Catterick Road Catterick Garrison	Roadside	420754	498280	NO ₂	No	0.0	1.8	No	2.7
HDC28	Bridge Street Bedale (S1)	Roadside	426733	488169	NO ₂	No	1.0	1.5	No	3.0
HDC29	White Bear Hotel Bedale (S2)	Roadside	426702	488141	NO ₂	No	0.0	1.5	No	3.5
HDC30	Commerce House Bedale (S3)	Roadside	426681	488132	NO ₂	No	18.0	4.5	No	3.0
HDC4	Northallerton South Parade	Roadside	436558	493326	NO ₂	No	0.0	3.0	No	3.0
HDC3	Northallerton Bankhead Road	Suburban	437714	493626	NO ₂	No	6.0	1.5	No	3.0
HDC2	Northallerton Pennine View	Suburban	435858	492676	NO ₂	No	7.0	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)
HDC5	Thirsk	Suburban	442384	481510	NO ₂	No	7.5	1.5	No	3.0
HDC6	Easingwold	Suburban	453011	469267	NO ₂	No	6.0	2.0	No	3.0
HDC7	Bedale	Suburban	427096	487894	NO ₂	No	10.0	2.5	No	3.0
HDC8	Great Ayton Rosehill	Suburban	456243	510859	NO ₂	No	4.0	2.0	No	3.0
HDC10	Aiskew	Roadside	427530	488821	NO ₂	No	1.0	2.5	No	3.5
HDC61	Great Ayton Newton Road	Roadside	456345	511088	NO ₂	No	4.0	2.0	No	3.0
HDC62	Morton on Swale	Roadside	432463	491936	NO ₂	No	2.2	1.5	No	3.0
HDC63	Skipton on Swale	Roadside	436652	479787	NO ₂	No	3.0	1.5	No	3.0
HDC64	Shipton by Benningbrough	Roadside	455278	458663	NO ₂	No	3.2	1.5	No	3.0
HDC53	York Vale House (S1)	Roadside	437037	493967	NO ₂	No	4.7	2.5	No	3.0
HDC54	Grosvenor House, East Road (S2)	Roadside	437039	493873	NO ₂	No	8.0	2.0	No	3.0
HDC55	5 Crosby Road (S3)	Roadside	437121	493879	NO ₂	No	1.8	1.8	No	3.0
HDC56	9 Crosby Road (S4)	Roadside	437140	493852	NO ₂	No	2.1	1.4	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)
HDC57	16 Crosby Road (S5)	Roadside	437176	493762	NO ₂	No	2.4	1.7	No	3.0
HDC12	Masons Arms	Roadside	436885	494104	NO ₂	No	4.5	2.0	No	3.0
HDC13	Hunt and Wrigley	Roadside	436877	494087	NO ₂	No	16.0	4.0	No	3.0
HDC14	Grande	Roadside	436886	494091	NO ₂	No	16.0	4.0	No	2.5
HDC15	The Tithe	Roadside	436933	494101	NO ₂	No	4.0	5.5	No	3.0
HDC16	Uno Momento	Roadside	436950	494105	NO ₂	No	4.0	5.0	No	3.0
HDC17	Odana	Roadside	436963	494107	NO ₂	No	5.0	4.5	No	3.0
HDC65	North Moor Road (S1)	Roadside	436156	496385	NO ₂	No	4.0	1.5	No	3.0
HDC66	North Moor Road (S2)	Roadside	436492	495337	NO ₂	No	3.5	1.5	No	3.0
HDC67	North Moor Road Bridge (S3)	Roadside	437039	495291	NO ₂	No	3.5	1.5	No	3.0
HDC68	Portland Road Junction (S4)	Roadside	437182	495273	NO ₂	No	2.6	1.5	No	3.0
HDC39	Northallerton A684 (S1)	Roadside	437109	494970	NO ₂	No	13.7	2.7	No	3.0
HDC40	Northallerton A684 (S2)	Roadside	437083	494958	NO ₂	No	13.0	1.8	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)
HDC41	Northallerton A684 (S3)	Roadside	436988	494596	NO ₂	No	8.7	1.6	No	3.0
HDC42	Northallerton A684 (S4)	Roadside	436999	494584	NO ₂	No	7.8	3.0	No	3.0
HDC43	Northallerton A684 (S5)	Roadside	436995	494515	NO ₂	No	8.8	3.6	No	3.0
HDC44	Northallerton A684 (S6)	Roadside	436973	494436	NO ₂	No	7.0	3.0	No	3.0
HDC45	Northallerton A684 (S7)	Roadside	436975	494395	NO ₂	No	8.0	2.8	No	3.0
HDC46	Northallerton A684 (S8)	Roadside	436934	494296	NO ₂	No	5.5	2.7	No	3.0
HDC47	Northallerton A684 (S9)	Roadside	436923	494220	NO ₂	No	2.5	2.6	No	3.0
HDC48	Northallerton Quaker Lane (S10)	Roadside	436973	494519	NO ₂	No	11.4	1.7	No	3.0
HDC49	Northallerton Quaker Lane (S11)	Roadside	436907	494500	NO ₂	No	6.5	1.6	No	3.0
HDC50	Northallerton Quaker Lane (S12)	Roadside	436717	494395	NO ₂	No	5.0	1.8	No	3.0
HDC51	Northallerton Quaker Lane (S13)	Roadside	436691	494388	NO ₂	No	2.3	0.2	No	3.0
HDC52	Northallerton Quaker Lane (S14) Windsor	Roadside	436680	494362	NO ₂	No	0.0	2.0	No	3.0

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HDC33	11 Westgate Thirsk (S1)	Roadside	442783	481896	NO ₂	No	0.0	1.0	No	3.0
HDC34	27 Westgate Thirsk (S2)	Kerbside	442815	481915	NO ₂	No	2.0	0.5	No	3.0
HDC35	2 Castlegate Thirsk (S3)	Roadside	442871	481943	NO ₂	No	1.0	3.0	No	3.0
HDC59	HDC59 6 Thirsk Road (S2)	Roadside	436893	493526	NO ₂	No	1.0	1.5	No	3.0
HDC60	7 Thirsk Road (S3)	Roadside	436879	493572	NO ₂	No	1.0	2.0	No	3.0
HDC69	1 Foundry Way Leeming Bar	Roadside	436461	493175	NO ₂	No	0.6	1.5	No	2.5
HDC70	Northallerton The Crossings (est. July 24)	Roadside	428885	490128	NO ₂	No	2.6	2.0	No	2.5
RYE1, RYE2, RYE3	Yorkersgate, Butcher Corner, Malton 3 (NAS3)	Kerbside	478844	471733	NO ₂	No	0.9	3.0	No	3.0
RYE4	Wheelgate (1) Malton (NAS4)	Roadside	478843	471596	NO ₂	No	0.0	2.8	No	2.7
RYE5	Old Maltongate (1) Malton (NAS5)	Roadside	479028	471541	NO ₂	No	1.1	0.5	No	3.0
RYE6	Castlegate (1) Malton (NAS6)	Roadside	479869	470761	NO ₂	No	0.0	2.0	No	2.7
RYE7	Castlegate (2) Malton (NAS7)	Kerbside	478661	471630	NO ₂	No	0.2	2.0	No	3.3

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RYE8	Norton, 13 Kingston Rd. (NAS8)	Urban Background	479668	471463	NO ₂	No	9.0	2.0	No	4.0
RYE9	Yorkersgate (1) Malton (NAS9)	Roadside	478552	471609	NO ₂	No	2.2	0.5	No	3.0
RYE10	Scarborough Road, Norton (NAS10)	Roadside	495854	476759	NO ₂	No	0.0	3.1	No	3.0
RYE11	Yorkersgate (2), Malton (NAS11)	Roadside	485362	474416	NO ₂	No	0.0	2.0	No	3.0
RYE12	Sherburn (NAS12)	Kerbside	479942	483826	NO ₂	No	0.5	2.5	No	2.2
RYE13	Rillington (NAS13)	Roadside	478927	471559	NO ₂	No	18.0	3.5	No	3.0
RYE14	Pickering (NAS14)	Kerbside	461282	483821	NO ₂	No	20.0	0.4	No	2.5
RYE15	Castlegate (3), Malton (NAS15)	Roadside	478608	471881	NO ₂	No	0.0	2.4	No	2.7
RYE16	Helmsley (NAS16)	Roadside	478911	471767	NO ₂	No	11.0	0.3	No	2.5
RYE17	Wheelgate (2), Malton (NAS17)	Kerbside	478440	472037	NO ₂	No	0.0	1.7	No	2.5
RYE18	Old Malton Gate (2) Malton (NAS18)	Kerbside	479120	471398	NO ₂	No	0.0	1.5	No	3.2
RYE19	Newbiggin, Malton (NAS19)	Roadside	479363	472468	NO ₂	No	3.8	1.0	No	2.5

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RYE20	Church Street 1, Norton (NAS20)	Roadside	478792	472377	NO ₂	No	14.5	0.5	No	2.5
RYE22	Pasture Lane, Malton (NAS22)	Kerbside	479288	471386	NO ₂	No	0.0	2.0	No	3.0
RYE21	Highfield Road, Malton (NAS21)	Roadside	479173	471281	NO ₂	No	4.7	1.2	No	2.5
RYE23	Church Street 2, Norton (NAS23)	Kerbside	479288	471386	NO ₂	No	2.3	0.8	No	2.0
RYE24	St. Nicholas Street, Norton (NAS24)	Roadside	479173	471281	NO ₂	No	10.0	1.2	No	3.0
H1	5 Otley Road, Killinghall	Roadside	428594	458666	NO ₂	No	0.0	2.4	No	1.8
H2	24 Low Skellgate, Ripon	Roadside	431044	471039	NO ₂	No	0.0	1.6	No	2.0
H6	27 Water Skellgate, Ripon	Roadside	431189	471146	NO ₂	No	0.0	4.8	No	2.0
H7	1 Low Skellgate, Ripon	Roadside	431110	471124	NO ₂	No	0.0	2.5	No	2.0
H8	24 High Skellgate, Ripon	Roadside	431155	471216	NO ₂	No	0.0	1.7	No	2.1
H9	9 High Skellgate, Ripon	Roadside	431135	471186	NO ₂	No	0.0	1.7	No	2.6
H10	3a Westgate, Ripon	Roadside	431146	471258	NO ₂	No	0.0	1.8	No	2.0
H12	Vale Court, Knaresborough	Roadside	434715	457387	NO ₂	No	0.0	8.1	No	1.5

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H13	21 Bond End, Knaresborough	Roadside	434707	457368	NO ₂	Yes (Kboro AQMA No.1)	0.0	1.0	No	2.2
H14	9 Bond End, Knaresborough	Roadside	434759	457375	NO ₂	Yes (Kboro AQMA No.1)	0.0	1.8	No	2.0
H16	10 Bond End, Knaresborough	Roadside	434763	457388	NO ₂	Yes (Kboro AQMA No.1)	0.0	2.5	No	1.8
H17	16-18 Bond End, Knaresborough	Roadside	434725	457405	NO ₂	Yes (Kboro AQMA No.1)	0.0	1.5	No	1.9
H18	10 York Place, Knaresborough	Roadside	435210	456918	NO ₂	Yes (Kboro AQMA No.1)	0.0	3.2	No	1.8
H19	35 High Street, Knaresborough	Roadside	435012	457084	NO ₂	No	0.0	1.5	No	2.4
H20	24 High Street, Knaresborough	Roadside	435133	457009	NO ₂	No	0.0	2.3	No	2.5
H21	10 High Street, Knaresborough	Roadside	435158	456992	NO ₂	No	0.0	1.5	No	2.0
H22	14 York Place, Knaresborough	Roadside	435224	456913	NO ₂	No	0.0	3.4	No	2.1
H23	34b High Street, Harrogate	Roadside	432918	455959	NO ₂	No	0.0	3.0	No	2.4
H24	Woodlands Pub, Hookstone Drive	Roadside	432477	454805	NO ₂	Yes (Hgate AQMA No.1)	0.2	2.0	No	2.5
H4, H5, H25	5 Low Skellgate, Ripon	Roadside	431087	471100	NO ₂	No	0.0	1.5	No	2.1
H26	Woodlands Pub, Wetherby Road	Roadside	432494	454808	NO ₂	Yes (Hgate AQMA No.1)	0.0	1.0	No	3.6

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H28	77 Harlow Crescent	Urban Background	429313	453820	NO ₂	No	0.0	5.0	No	1.9
H29	Epsom Court, Harrogate	Kerbside	429534	456882	NO ₂	No	2.3	0.2	No	2.0
H30	Wintringham House, High Street, Knaresborough	Roadside	435137	456968	NO ₂	No	0.0	2.3	No	2.3
H33	207 Skipton Road, Harrogate	Roadside	430224	456727	NO ₂	No	0.0	2.0	No	2.1
H34	Woodlands Pub Lamppost, Wetherby Road	Roadside	432508	454804	NO ₂	Yes (Hgate AQMA No.1)	4.6	1.5	No	1.9
H35	208 Kings Road, Harrogate	Roadside	430513	456467	NO ₂	No	2.7	2.0	No	1.9
H36	8-10 Westmoreland Street, Harrogate	Roadside	430925	455804	NO ₂	No	0.0	1.5	No	2.0
H37	87 Skipton Road, Harrogate	Roadside	430573	456436	NO ₂	No	0.0	8.0	No	2.0
H38	59 Skipton Road, Harrogate	Roadside	430647	456324	NO ₂	No	0.0	3.0	No	1.7
H39	Devonshire Place, Harrogate	Kerbside	430995	455831	NO ₂	No	3.0	0.6	No	1.8
H40	Vintage Boutique, Westmoreland Street, Harrogate	Roadside	430935	455826	NO ₂	No	0.0	1.5	No	2.3
H41	16 York Place, Knaresborough	Roadside	435235	456907	NO ₂	No	0.0	3.4	No	2.0

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H42	Taxi Rank, Station Parade, Harrogate	Urban Centre	430367	455339	NO ₂	No	0.0	0.1	No	2.1
H43	1 Station Square, Harrogate	Urban Centre	430397	455194	NO ₂	No	0.0	0.5	No	2.0
H27, H44	The Old Police House, Walshford	Roadside	441851	453686	NO ₂	No	0.0	12.2	No	2.0
H46	93 Skipton Road, Harrogate	Roadside	430535	456495	NO ₂	No	0.0	8.6	No	1.8
H47	43 Woodfield Road, Harrogate	Urban Background	430800	456572	NO ₂	No	0.0	30.8	No	1.6
H49	29 Bond End, Knaresborough	Roadside	434623	457314	NO ₂	No	0.0	0.9	No	2.1
H50	55 Bond End, Knaresborough	Roadside	434578	457260	NO ₂	No	0.0	1.9	No	2.3
H51	The Royal Oak, Knaresborough	Roadside	434796	457393	NO ₂	Yes (Kboro AQMA No.1)	0.0	1.3	No	2.3
H52	High Street, Knaresborough	Roadside	434835	457329	NO ₂	Yes (Kboro AQMA No.1)	0.0	2.1	No	2.0
H53	The Old Tannery, York Place, Knaresborough	Roadside	435253	456893	NO ₂	No	0.0	3.4	No	2.0
H54	30 Low Skellgate, Ripon	Roadside	431075	471077	NO ₂	No	0.0	1.5	No	2.7
H55	35 Low Skellgate, Ripon	Roadside	431102	471101	NO ₂	No	0.0	2.0	No	2.1

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H56	Crown Court, Ripon	Roadside	431151	471119	NO ₂	No	0.0	3.8	No	2.1
H57	6 Water Skellgate, Ripon	Roadside	431193	471132	NO ₂	No	0.0	2.3	No	2.0
H58	17 Water Skellgate, Ripon	Roadside	431242	471135	NO ₂	No	0.0	2.1	No	2.2
H15, 59, H60	117 High Street, Knaresborough	Roadside	434804	457358	NO ₂	Yes (Kboro AQMA No.1)	0.0	2.6	No	1.9
H61	13 East Parade, Harrogate	Roadside	430478	455297	NO ₂	No	1.7	2.3	No	2.2
H62	Bilton Lane, Harrogate	Roadside	430420	456798	NO ₂	No	2.0	2.6	No	2.0
H63	109 Station Parade, Harrogate	Roadside	430548	454832	NO ₂	No	1.5	2.3	No	2.0
H64	Station View, Knaresbrgh Road	Roadside	432806	455899	NO ₂	No	11.5	2.5	No	2.0
H67	Otley Road, Harrogate	Roadside	429503	454275	NO ₂	No	3.7	2.4	No	1.9
H70	Stray, Wetherby Road, Harrogate	Roadside	431592	455297	NO ₂	No	11.3	1.7	No	1.9
H71	Stray, Oatlands Drive, Hgate	Roadside	431175	454782	NO ₂	No	28.5	1.2	No	1.9
9N	Bryony Court	Urban Background	460899	430935	NO ₂	No	6.0	2.0	No	2.5

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4N	Brook St Opposite Ebor Opening	Roadside	461096	432191	NO ₂	No	5.0	1.0	No	2.5
3N	Carentan Close	Urban Background	460855	432820	NO ₂	No	7.0	1.5	No	2.5
S6	Preston Baker/Hairdresser New St	Roadside	461635	432372	NO ₂	Yes - New Street AQMA Order No.1	0.0	1.5	No	2.7
S5a, S5b, S5c	Roko Furniture 3 New St	Roadside	461659	432405	NO ₂	Yes - New Street AQMA Order No.1	0.0	1.5	No	2.5
S7a, S7b, S7c	21 New St 3	Roadside	461688	432434	NO ₂	Yes - New Street AQMA Order No.1	0.0	1.0	No	3.0
S2	Lamp Post 52 New St	Roadside	461689	432422	NO ₂	Yes - New Street AQMA Order No.1	5.0	1.7	No	2.5
S8	30 New St	Roadside	461697	432424	NO ₂	Yes - New Street AQMA Order No.1	0.0	6.0	No	3.0
S4	Eye of Bri New St	Roadside	461681	432407	NO ₂	Yes - New Street AQMA Order No.1	0.0	1.3	No	2.5

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S3a, S3b, S3c	Tutti's 3 New St	Roadside	461670	432408	NO ₂	Yes - New Street AQMA Order No.1	0.0	1.5	No	2.5
S1	Fringe Hair New St	Roadside	461638	432345	NO ₂	Yes - New Street AQMA Order No.1	0.0	2.4	No	2.5
S11	Lisa's Florist 10 The Crescent	Roadside	461507	432319	NO ₂	No	0.0	3.0	No	3.0
S10	Greggs Lamppost Gowthorpe	Roadside	461317	432356	NO ₂	No	0.0	1.0	No	2.5
S27	Scott Rd Lamppost 1	Roadside	461120	432303	NO ₂	No	2.2	2.1	No	2.2
S28	28 Scott Rd Downpipe	Roadside	461062	432475	NO ₂	No	2.2	3.8	No	2.2
S29	Scott Rd Lamppost 12	Roadside	461041	432539	NO ₂	No	2.2	2.2	No	2.2
S32	Elm Street Access Sign	Roadside	461871	432643	NO ₂	No	2.2	6.0	No	2.2
S34	Barlby Rd Lamppost 13	Roadside	461938	432710	NO ₂	No	2.2	2.7	No	2.2
S33	John Street Access Sign	Roadside	461935	432672	NO ₂	No	2.2	6.6	No	2.2
S31	Barlby Rd Lamppost 6	Roadside	461852	432594	NO ₂	No	2.2	1.9	No	2.2

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S30	Barlby Rd Lamppost 3	Roadside	461806	432546	NO ₂	No	2.2	2.1	No	2.2
S18	5B Millgate	Roadside	461517	432582	NO ₂	No	2.5	1.3	No	2.5
S19	10 Millgate	Roadside	461526	432584	NO ₂	No	2.5	1.6	No	2.5
S23	Lamppost 26 Ousegate	Roadside	461821	432376	NO ₂	No	2.5	0.6	No	2.5
S24	Lamppost 27 Ousegate	Roadside	461788	432379	NO ₂	No	2.5	0.6	No	2.5
S25	Lamppost 28 Ousegate	Roadside	461762	432408	NO ₂	No	2.5	0.6	No	2.5
S35	Park Street	Roadside	461617	432148	NO ₂	No	4.5	2.5	No	2.5
C1	Station Road Bentham	Roadside	366749	469197	NO ₂	No	0.9	1.4	No	2.0
C2	Duke Street Settle	Roadside	381959	463625	NO ₂	No	0.6	1.2	No	2.0
C3	Newmarket Street Skipton	Roadside	399103	451611	NO ₂	No	0.5	1.4	No	2.0
C4	Craven Street Skipton	Roadside	398820	451196	NO ₂	No	3.9	1.5	No	2.0
C5	Main Street Crosshills	Roadside	400629	444999	NO ₂	No	1.4	1.7	No	2.0
C6	Station Road Crosshills	Roadside	400811	445217	NO ₂	No	6.1	1.3	No	2.0

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C7	Broughton Road Skipton	Roadside	397795	451308	NO ₂	No	2.3	1.8	No	2.0
C8	Water Street Skipton	Roadside	398898	451835	NO ₂	No	0.4	1.0	No	2.0
C9	Colne Road Glusburn	Roadside	400006	444760	NO ₂	No	1.8	2.4	No	2.0
C10	High Street Gargrave	Roadside	393272	454225	NO ₂	No	0.2	3.0	No	2.0
C11	Main Street Hellifield	Roadside	385397	456675	NO ₂	No	2.7	2.8	No	2.0
C12	Brown Bank Terrace Crosshills	Roadside	401212	445224	NO ₂	No	3.5	0.8	No	2.0
SC1	Odeon Roundabout, Scarborough	Roadside	503929	488389	NO ₂	No	0.0	2.0	No	2.0
SC2	Ramshill 1, Scarborough	Roadside	504094	487815	NO ₂	No	1.4	2.7	No	2.0
SC3	Ramshill 2, Scarborough	Roadside	504109	487497	NO ₂	No	8.0	2.5	No	2.0
SC4	Main Street, Cayton	Roadside	505466	483378	NO ₂	No	0.0	1.1	No	2.0
SC5	East Ayton 1	Roadside	498998	484889	NO ₂	No	0.3	1.4	No	2.0
SC6	East Ayton 2	Roadside	499023	484885	NO ₂	No	0.4	2.2	No	2.0
SC7	Snainton 1	Roadside	492186	482266	NO ₂	No	0.1	1.0	No	2.0

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SC8	Snainton 2	Roadside	492161	482291	NO ₂	No	0.1	1.2	No	2.0
SC9	Valley Road Junc. Scarborough	Roadside	503288	487538	NO ₂	No	7.0	3.6	No	2.0
SC10	Spring Bank, Scarborough	Roadside	503273	487523	NO ₂	No	2.2	0.4	No	2.0
SC12	Seamer Road 2, Scarborough	Roadside	503218	487940	NO ₂	No	1.0	2.8	No	2.0
SC13	Falsgrave Road, Scarborough	Roadside	503088	487922	NO ₂	No	4.4	2.9	No	2.0
SC14	Strawberry Court, Scarborough	Roadside	503045	488003	NO ₂	No	2.1	0.5	No	2.0
SC15	Manor Road, Scarborough	Roadside	502929	488227	NO ₂	No	10.0	0.6	No	2.0
SC16	Ruswarp 1	Roadside	488913	509314	NO ₂	No	12.0	1.9	No	2.0
SC17	Ruswarp 2	Roadside	488912	509271	NO ₂	No	0.0	1.0	No	2.0
SC18	Dock End, Whitby	Kerbside	489863	510887	NO ₂	No	0.0	0.0	No	2.0
SC19	Downdinner Hill, Whitby 2	Roadside	489388	510619	NO ₂	No	10.0	1.5	No	2.0
SC20	Prospect Hill, Whitby	Roadside	489277	510331	NO ₂	No	4.5	1.2	No	2.0
SC21	Helredale Road 1, Whitby	Roadside	490370	509314	NO ₂	No	11.0	0.5	No	2.0

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SC22	Beulah Terrace, Scarborough	Kerbside	503741	488079	NO ₂	No	8.0	0.0	No	2.0
SC24	Peasholm Drive, Scarborough	Urban Background	503615	489367	NO ₂	No	14.0	4.6	No	2.0
SC25	Bridlington Street	Roadside	509679	477308	NO ₂	No	0.0	2.8	No	2.0
SC26	Murray Street, Filey	Roadside	511698	480664	NO ₂	No	0.0	1.5	No	2.0
SC27	East borough	Kerbside	504703	488799	NO ₂	No	1.8	0.3	No	2.0
SC28	St Nicholas Street, Scarborough	Kerbside	504357	488553	NO ₂	No	0.0	2.0	No	2.0

Notes:

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

(2) N/A if not applicable.

Table A.2 – Annual Mean NO2 Monitoring Results: Non-Automatic Monitoring (µg/m3)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
R2	417180	501125	Roadside	100.0	100.0	18.4	18.9	17.8	15.5	15.2
R3	418066	501490	Roadside	100.0	100.0	11.4	11.6	11.0	11.4	9.4
R4	418504	501455	Urban Background	100.0	100.0	5.8	5.6	5.7	4.8	4.6
R6	419207	506509	Roadside	100.0	100.0	15.7	17.3	16.7	16.1	14.0
R8	417179	501127	Roadside	90.6	90.6	19.8	21.4	20.3	18.9	17.1
R10	417381	501281	Roadside	100.0	100.0	23.5	24.3	22.4	21.9	19.8
R11	417377	501317	Roadside	100.0	100.0	26.4	27.5	25.4	23.0	20.9
R12	417542	501275	Roadside	100.0	100.0	16.1	17.4	16.2	14.2	15.8
R13	417536	501258	Roadside	100.0	100.0	15.4	17.3	17.7	14.8	15.5
R15	417500	501263	Roadside	100.0	100.0	16.0	18.5	18.4	15.9	14.5
R16	417451	501269	Roadside	100.0	100.0	22.7	23.8	22.2	20.4	18.9
R17	417370	501262	Roadside	100.0	100.0	17.1	18.2	17.8	17.5	15.0
R18	417661	501297	Roadside	100.0	100.0	16.9	18.4	17.3	15.3	16.0
R19	417312	501037	Roadside	100.0	100.0	15.5	17.3	16.4	16.3	13.9
R20	420754	498280	Roadside	92.5	92.5		20.8	19.5	16.9	16.7
HDC28	426733	488169	Roadside	90.6	90.6	16.5	19.1	18.5	17.1	13.7
HDC29	426702	488141	Roadside	90.6	90.6	22.1	23.2	18.1	13.5	12.9
HDC30	426681	488132	Roadside	83.0	83.0	17.1	15.8	16.1	15.2	17.1
HDC4	436558	493326	Roadside	90.6	90.6	20.2	22.8	20.7	20.0	19.8
HDC3	437714	493626	Suburban	100.0	49.1	9.0	7.7	7.5	7.9	6.8
HDC2	435858	492676	Suburban	90.6	90.6	7.8	8.8	8.7	6.7	7.5

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
HDC5	442384	481510	Suburban	81.1	81.1	9.1	8.3	9.1	7.8	8.9
HDC6	453011	469267	Suburban	83.0	83.0	9.0	8.3	8.6	8.0	6.9
HDC7	427096	487894	Suburban	90.6	90.6	7.2	7.0	6.7	6.1	6.0
HDC8	456243	510859	Suburban	90.6	90.6	7.2	7.1	7.5	5.9	5.5
HDC10	427530	488821	Roadside	90.6	90.6	9.7	10.5	9.8	9.3	9.0
HDC61	456345	511088	Roadside	81.1	81.1	8.5	10.7	9.7	9.9	9.0
HDC62	432463	491936	Roadside	83.0	83.0			11.5	9.3	8.2
HDC63	436652	479787	Roadside	90.6	90.6			11.0	10.7	9.6
HDC64	455278	458663	Roadside	90.6	90.6			18.4	17.1	15.8
HDC53	437037	493967	Roadside	81.1	81.1	17.8	19.7	17.1	14.9	14.8
HDC54	437039	493873	Roadside	90.6	90.6	18.6	20.9	19.4	19.6	18.7
HDC55	437121	493879	Roadside	90.6	90.6	14.3	13.0	13.4	11.5	10.1
HDC56	437140	493852	Roadside	90.6	90.6	16.6	14.6	13.6	13.1	11.9
HDC57	437176	493762	Roadside	90.6	90.6	11.2	11.4	11.0	10.1	9.7
HDC12	436885	494104	Roadside	90.6	90.6	22.5	23.7	22.5	20.8	18.5
HDC13	436877	494087	Roadside	90.6	90.6	24.3	24.9	25.0	22.0	20.9
HDC14	436886	494091	Roadside	90.6	90.6	23.7	24.2	25.2	22.8	21.1
HDC15	436933	494101	Roadside	90.6	90.6	20.7	23.0	22.5	19.6	19.0
HDC16	436950	494105	Roadside	90.6	90.6	20.7	22.0	22.6	20.0	17.6
HDC17	436963	494107	Roadside	90.6	90.6	15.7	17.3	15.9	13.5	13.8
HDC65	436156	496385	Roadside	90.6	90.6			13.5	12.8	13.1
HDC66	436492	495337	Roadside	90.6	90.6			13.6	12.1	11.8
HDC67	437039	495291	Roadside	90.6	90.6			12.2	11.1	11.1
HDC68	437182	495273	Roadside	90.6	90.6			12.0	10.4	11.7
HDC39	437109	494970	Roadside	90.6	90.6	13.1	13.7	13.9	11.0	10.9
HDC40	437083	494958	Roadside	90.6	90.6	19.9	22.1	22.8	18.1	16.5

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
HDC41	436988	494596	Roadside	90.6	90.6	22.7	24.4	22.5	18.6	17.3
HDC42	436999	494584	Roadside	90.6	90.6	18.1	19.9	19.3	16.3	15.8
HDC43	436995	494515	Roadside	90.6	90.6	21.3	22.1	22.2	18.7	17.0
HDC44	436973	494436	Roadside	90.6	90.6	19.7	22.1	21.2	17.9	17.7
HDC45	436975	494395	Roadside	90.6	90.6	18.2	19.6	18.9	17.0	16.6
HDC46	436934	494296	Roadside	90.6	90.6	20.6	23.9	21.2	19.7	19.3
HDC47	436923	494220	Roadside	90.6	90.6	19.2	21.7	20.9	18.7	17.5
HDC48	436973	494519	Roadside	90.6	90.6	16.9	18.9	18.1	13.9	13.0
HDC49	436907	494500	Roadside	90.6	90.6	14.1	14.8	14.2	11.2	9.7
HDC50	436717	494395	Roadside	90.6	90.6	17.2	18.3	18.4	14.2	10.9
HDC51	436691	494388	Roadside	90.6	90.6	16.2	18.7	18.3	13.8	13.3
HDC52	436680	494362	Roadside	90.6	90.6	16.1	17.2	17.4	13.6	12.9
HDC33	442783	481896	Roadside	90.6	90.6	23.1	25.4	24.2	20.6	19.4
HDC34	442815	481915	Kerbside	83.0	83.0	26.3	30.0	27.4	25.5	26.3
HDC35	442871	481943	Roadside	90.6	90.6	19.8	21.2	21.4	18.5	18.3
HDC59	436893	493526	Roadside	90.6	90.6	16.3	16.9	22.4	21.4	20.7
HDC60	436879	493572	Roadside	90.6	90.6	23.2	23.3	18.9	16.4	17.1
HDC69	436461	493175	Roadside	90.6	90.6					11.5
HDC70	428885	490128	Roadside	80.0	34.0					25.6
RYE1, RYE2, RYE3	478844	471733	Kerbside	90.6	90.6	24.9	25.3	23.7	23.4	22.8
RYE4	478843	471596	Roadside	90.6	90.6	24.9	27.6	26.5	23.8	24.8
RYE5	479028	471541	Roadside	83.0	83.0	23.4	27.1	24.8	22.0	20.3
RYE6	479869	470761	Roadside	83.0	83.0	19.1	18.9	19.5	18.9	18.9
RYE7	478661	471630	Kerbside	75.0	75.0	24.6	26.9	25.7	25.8	24.8

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
RYE8	479668	471463	Urban Background	83.0	83.0	8.4	7.6	7.6	6.3	6.0
RYE9	478552	471609	Roadside	83.0	83.0	26.8	26.3	26.1	21.8	25.6
RYE10	495854	476759	Roadside	90.6	90.6	16.8	17.8	17.0	15.9	14.5
RYE11	485362	474416	Roadside	90.6	90.6	18.2	20.7	18.7	18.3	17.1
RYE12	479942	483826	Kerbside	90.6	90.6	21.1	21.8	21.0	18.3	19.1
RYE13	478927	471559	Roadside	75.0	75.0	13.7	13.7	12.3	11.7	12.2
RYE14	461282	483821	Kerbside	90.6	90.6	17.9	18.8	18.7	16.6	16.0
RYE15	478608	471881	Roadside	90.6	90.6	25.2	25.4	25.1	25.0	24.6
RYE16	478911	471767	Roadside	90.6	90.6	13.1	12.4	12.6	11.4	10.2
RYE17	478440	472037	Kerbside	81.1	81.1	17.1	19.1	17.3	16.2	16.3
RYE18	479120	471398	Kerbside	90.6	90.6	24.8	25.6	25.0	24.3	23.1
RYE19	479363	472468	Roadside	75.0	75.0	12.2	13.8	12.4	11.4	11.7
RYE20	478792	472377	Roadside	90.6	90.6	16.0	20.0	16.8	14.9	15.2
RYE22	479288	471386	Kerbside	83.0	83.0	13.2	13.6	13.1	12.3	12.4
RYE21	479173	471281	Roadside	90.6	90.6	13.3	13.3	13.6	13.7	11.9
RYE23	479288	471386	Kerbside	83.0	83.0	17.3	20.0	18.9	16.0	16.7
RYE24	479173	471281	Roadside	75.0	75.0	10.4	10.5	10.7	11.0	10.6
H1	428594	458666	Roadside	100.0	100.0	15.6	17.7	19.9	16.7	15.2
H2	431044	471039	Roadside	75.0	75.0	17.6	19.9	18.7	17.2	17.1
H6	431189	471146	Roadside	100.0	100.0	16.9	17.5	16.9	15.7	14.8
H7	431110	471124	Roadside	100.0	100.0	19.2	22.5	19.5	18.3	16.8
H8	431155	471216	Roadside	90.6	90.6	23.1	30.1	26.3	23.4	23.9
H9	431135	471186	Roadside	100.0	100.0	22.1	27.1	25.6	23.2	22.2
H10	431146	471258	Roadside	90.6	90.6	22.4	25.3	23.1	21.4	20.1
H12	434715	457387	Roadside	100.0	100.0	19.8	23.3	21.5	19.6	19.0

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
H13	434707	457368	Roadside	100.0	100.0	30.7	38.3	38.4	31.2	30.3
H14	434759	457375	Roadside	90.6	90.6	33.8	36.8	38.3	33.9	27.9
H16	434763	457388	Roadside	75.0	75.0	25.6	29.5	27.3	23.0	22.5
H17	434725	457405	Roadside	92.5	92.5	18.7	21.3	19.9	18.3	16.5
H18	435210	456918	Roadside	92.5	92.5	21.4	24.7	23.6	21.7	22.5
H19	435012	457084	Roadside	100.0	100.0	22.2	27.1	25.6	21.9	21.2
H20	435133	457009	Roadside	100.0	100.0	24.9	31.1	27.3	26.7	23.1
H21	435158	456992	Roadside	100.0	100.0	20.4	23.8	22.7	18.0	17.3
H22	435224	456913	Roadside	100.0	100.0	27.3	28.9	29.7	25.9	24.5
H23	432918	455959	Roadside	84.9	84.9	17.0	18.7	18.2	17.0	16.3
H24	432477	454805	Roadside	100.0	100.0	20.8	22.7	23.1	19.3	18.8
H4, H5, H25	431087	471100	Roadside	75.0	75.0	28.9	33.3	32.4		26.7
H26	432494	454808	Roadside	67.9	67.9	31.3	31.7	31.8	27.9	27.3
H28	429313	453820	Urban Background	100.0	100.0	8.8	9.3	8.3	7.7	6.6
H29	429534	456882	Kerbside	100.0	100.0	21.4	23.5	25.3	21.8	18.7
H30	435137	456968	Roadside	90.6	90.6	34.1	37.7	31.5	29.1	27.7
H33	430224	456727	Roadside	100.0	100.0	20.1	20.6	23.4	19.8	17.6
H34	432508	454804	Roadside	90.6	90.6	22.1	24.0	23.5	19.0	21.0
H35	430513	456467	Roadside	100.0	100.0	16.0	19.6	18.0	15.4	15.1
H36	430925	455804	Roadside	100.0	100.0	17.3	20.3	19.1	17.1	14.3
H37	430573	456436	Roadside	100.0	100.0	17.4	20.9	20.5	19.3	18.3
H38	430647	456324	Roadside	100.0	100.0	22.5	21.7	22.4	20.8	18.2
H39	430995	455831	Kerbside	100.0	100.0	30.7	31.9	33.4	31.1	28.9
H40	430935	455826	Roadside	100.0	100.0	18.9	22.2	20.8	19.2	17.2

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
H41	435235	456907	Roadside	100.0	100.0	23.9	27.7	26.3	23.1	21.7
H42	430367	455339	Urban Centre	100.0	100.0	30.6	34.1	33.9	30.9	30.8
H43	430397	455194	Urban Centre	83.0	83.0	16.6	19.4	19.0	16.6	13.6
H27, H44	441851	453686	Roadside	100.0	100.0	18.9	21.2	19.2	16.8	16.3
H46	430535	456495	Roadside	100.0	100.0	17.7	17.6	18.2	16.0	15.5
H47	430800	456572	Urban Background	92.5	92.5	10.6	11.3	9.4	7.9	8.1
H49	434623	457314	Roadside	90.6	90.6	24.7	29.8	29.1	25.1	20.4
H50	434578	457260	Roadside	81.1	81.1	25.6	30.5	28.7	25.9	23.5
H51	434796	457393	Roadside	83.0	83.0	32.8	34.7	32.7	28.8	28.1
H52	434835	457329	Roadside	90.6	90.6	30.9	33.7	33.1	30.5	29.2
H53	435253	456893	Roadside	75.0	75.0	23.3	26.1	24.9	21.5	20.9
H54	431075	471077	Roadside	100.0	100.0	22.3	27.6	24.9	22.1	20.3
H55	431102	471101	Roadside	100.0	100.0	24.0	25.3	26.3	22.8	22.5
H56	431151	471119	Roadside	100.0	100.0	19.7	20.9	20.2	18.3	17.9
H57	431193	471132	Roadside	100.0	100.0	21.2	24.1	23.5	20.5	20.7
H58	431242	471135	Roadside	100.0	100.0	18.3	19.5	19.1	18.0	15.9
H15, H59, H60	434804	457358	Roadside	100.0	100.0	29.8	31.6	32.2	27.0	24.8
H61	430478	455297	Roadside	100.0	100.0	21.5	22.3	21.3	21.9	20.2
H62	430420	456798	Roadside	81.1	81.1	16.9	15.6	17.0	14.1	14.4
H63	430548	454832	Roadside	64.2	64.2		21.0	21.7	20.0	17.8

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
H64	432806	455899	Roadside	100.0	100.0		19.5	19.8	17.8	16.6
H67	429503	454275	Roadside	84.9	84.9			16.1	14.3	13.0
H70	431592	455297	Roadside	100.0	58.5					17.2
H71	431175	454782	Roadside	85.7	49.1					7.2
9N	460899	430935	Urban Background	81.1	81.1	10.8	11.1	10.9	9.7	9.2
4N	461096	432191	Roadside	75.0	75.0	17.1	21.7	18.7	17.7	16.6
3N	460855	432820	Urban Background	90.6	90.6	12.5	12.3	11.8	11.0	10.2
S6	461635	432372	Roadside	83.0	83.0	20.6	24.6	22.7	22.5	20.3
S5a, S5b, S5c	461659	432405	Roadside	90.6	90.6	29.6	33.3	30.1	32.8	29.7
S7a, S7b, S7c	461688	432434	Roadside	75.0	75.0	35.2	41.9	39.1	39.8	37.7
S2	461689	432422	Roadside	92.5	92.5	23.2	24.2	24.9	24.0	22.4
S8	461697	432424	Roadside	100.0	100.0	21.1	24.7	23.5	22.3	21.4
S4	461681	432407	Roadside	100.0	100.0	32.2	39.2	37.1	36.8	32.6
S3a, S3b, S3c	461670	432408	Roadside	100.0	100.0	25.8	33.0	30.6	30.8	27.7
S1	461638	432345	Roadside	92.5	92.5	24.2	28.3	26.8	26.4	24.2
S11	461507	432319	Roadside	92.5	92.5	24.3	27.8	27.1	24.3	23.5
S10	461317	432356	Roadside	69.8	69.8	22.6	26.6	23.7	23.4	21.5
S27	461120	432303	Roadside	84.9	84.9		32.7	28.1	26.1	25.1

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
S28	461062	432475	Roadside	100.0	100.0		19.1	16.6	15.3	15.0
S29	461041	432539	Roadside	92.5	92.5		21.8	20.1	18.4	17.6
S32	461871	432643	Roadside	90.6	90.6		15.1	13.8	13.7	13.0
S34	461938	432710	Roadside	90.6	90.6		23.3	20.8	20.0	18.8
S33	461935	432672	Roadside	66.0	66.0		15.5	14.3	13.6	12.9
S31	461852	432594	Roadside	90.6	90.6		20.1	17.6	17.9	16.3
S30	461806	432546	Roadside	90.6	90.6		21.3	18.4	18.7	17.4
S18	461517	432582	Roadside	100.0	100.0	21.0	24.7	23.5	21.4	20.6
S19	461526	432584	Roadside	100.0	100.0	22.7	29.2	26.5	25.4	24.6
S23	461821	432376	Roadside	83.0	83.0	15.9	17.1	15.9	16.7	16.2
S24	461788	432379	Roadside	90.6	90.6	19.6	20.9	20.2	19.5	18.9
S25	461762	432408	Roadside	100.0	100.0	18.8	21.3	20.6	20.2	19.0
S35	461617	432148	Roadside	83.0	83.0				19.6	19.6
C1	366749	469197	Roadside	100.0	100.0	13.0	14.2	14.5	13.0	12.6
C2	381959	463625	Roadside	100.0	100.0	15.8	17.5	16.7	14.8	14.5
C3	399103	451611	Roadside	100.0	100.0	19.2	21.7	22.3	19.7	18.4
C4	398820	451196	Roadside	90.6	90.6	14.4	17.6	16.5	15.2	14.6
C5	400629	444999	Roadside	100.0	100.0	21.7	24.7	24.4	21.5	21.4
C6	400811	445217	Roadside	100.0	100.0	17.1	20.0	18.8	17.2	15.3
C7	397795	451308	Roadside	100.0	100.0	19.3	15.3	15.8	13.4	11.9
C8	398898	451835	Roadside	100.0	100.0	15.2	17.5	17.8	15.0	13.7
C9	400006	444760	Roadside	100.0	100.0	16.4	19.1	18.1	18.6	16.5
C10	393272	454225	Roadside	100.0	100.0	22.6	22.4	22.1	20.5	18.1
C11	385397	456675	Roadside	100.0	100.0	21.0	16.7	16.4	14.4	13.9
C12	401212	445224	Roadside	90.6	90.6		14.6	15.4	13.8	12.2
SC1	503929	488389	Roadside	92.5	92.5	20.1	23.3	23.9	21.8	22.3

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
SC2	504094	487815	Roadside	100.0	100.0	18.3	21.4	23.3	20.5	20.5
SC3	504109	487497	Roadside	90.6	90.6	17.8	22.1	23.2	22.3	21.4
SC4	505466	483378	Roadside	90.6	90.6	10.6	13.4	12.7	11.2	11.0
SC5	498998	484889	Roadside	92.5	92.5	16.8	22.7	20.7	19.6	20.3
SC6	499023	484885	Roadside	90.6	90.6	15.8	17.8	16.1	15.8	16.0
SC7	492186	482266	Roadside	100.0	100.0	19.9	23.5	23.3	21.4	21.4
SC8	492161	482291	Roadside	75.0	75.0	13.3	17.1	17.7	16.6	14.3
SC9	503288	487538	Roadside	100.0	100.0	19.1	26.5	27.8	25.2	25.3
SC10	503273	487523	Roadside	83.0	83.0	17.7	19.5	22.1	19.8	19.6
SC12	503218	487940	Roadside	90.6	90.6	17.1	20.8	20.3	19.7	19.2
SC13	503088	487922	Roadside	100.0	100.0	17.4	22.8	21.6	20.8	20.1
SC14	503045	488003	Roadside	100.0	100.0	24.2	25.4	27.3	27.7	26.3
SC15	502929	488227	Roadside	100.0	100.0	13.6	20.8	16.6	15.3	14.0
SC16	488913	509314	Roadside	100.0	100.0	10.2	13.2	12.0	10.1	9.9
SC17	488912	509271	Roadside	100.0	100.0	15.4	18.9	17.8	15.9	15.0
SC18	489863	510887	Kerbside	100.0	100.0	12.2	15.9	14.8	13.7	13.0
SC19	489388	510619	Roadside	66.0	66.0	18.7	25.0	22.5	25.2	24.4
SC20	489277	510331	Roadside	100.0	100.0	12.0	15.1	13.2	12.6	12.4
SC21	490370	509314	Roadside	83.0	83.0	18.1	21.1	21.0	19.3	18.9
SC22	503741	488079	Kerbside	83.0	83.0				11.0	10.5
SC24	503615	489367	Urban Background	100.0	100.0	9.3	10.8	10.2	8.3	8.0
SC25	509679	477308	Roadside	90.6	90.6	10.8	13.1	12.1	10.9	10.5
SC26	511698	480664	Roadside	100.0	100.0	10.1	11.8	10.7	9.1	8.9
SC27	504703	488799	Kerbside	90.6	90.6	14.8	17.9	17.9	16.8	16.2
SC28	504357	488553	Kerbside	100.0	100.0	17.7	16.8	18.9	18.7	17.4

- ☒ Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.
- ☒ 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 $\mu\text{g}/\text{m}^3$.

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

NO_2 annual means exceeding $60\mu\text{g}/\text{m}^3$, 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%).

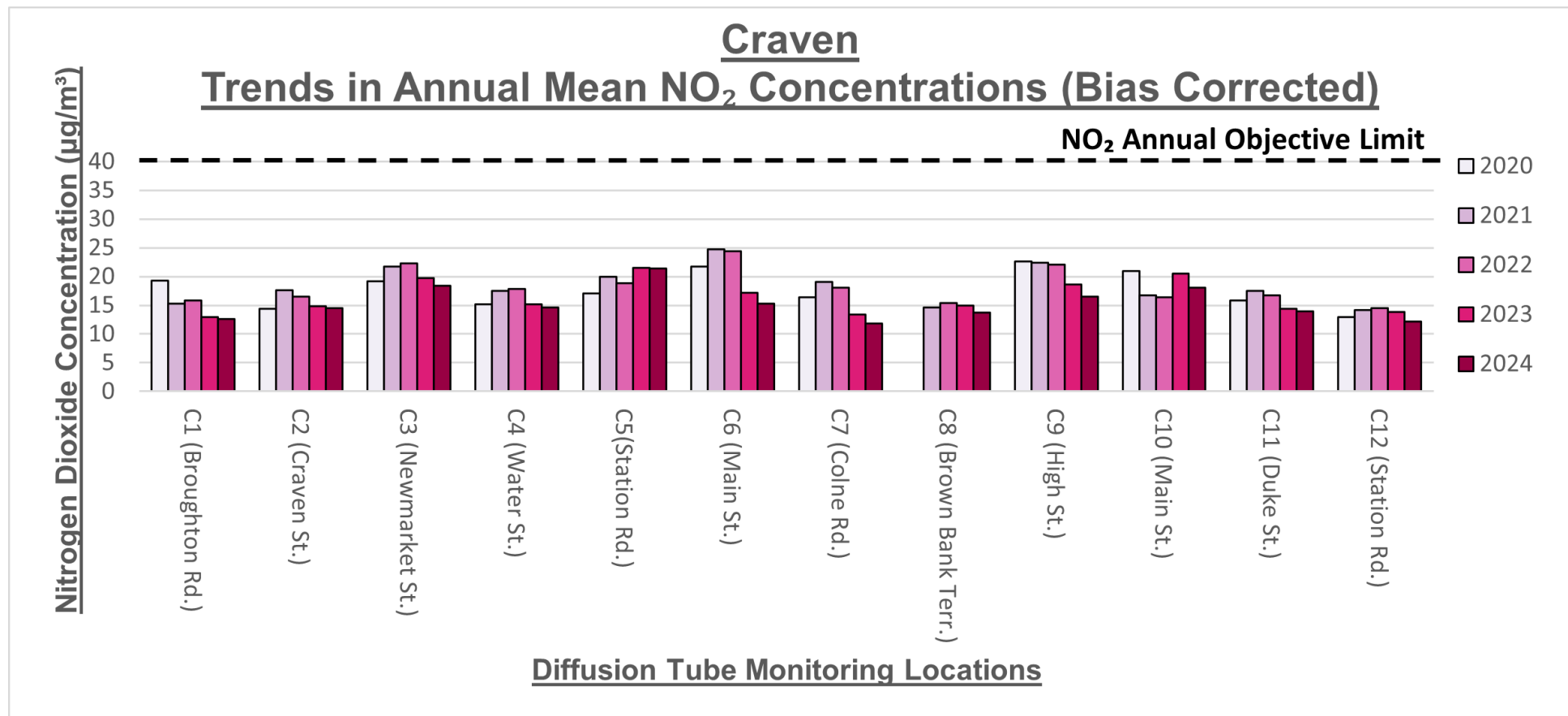
Figure A.1 – Trends in Annual Mean NO₂ Concentrations

Figure A.2

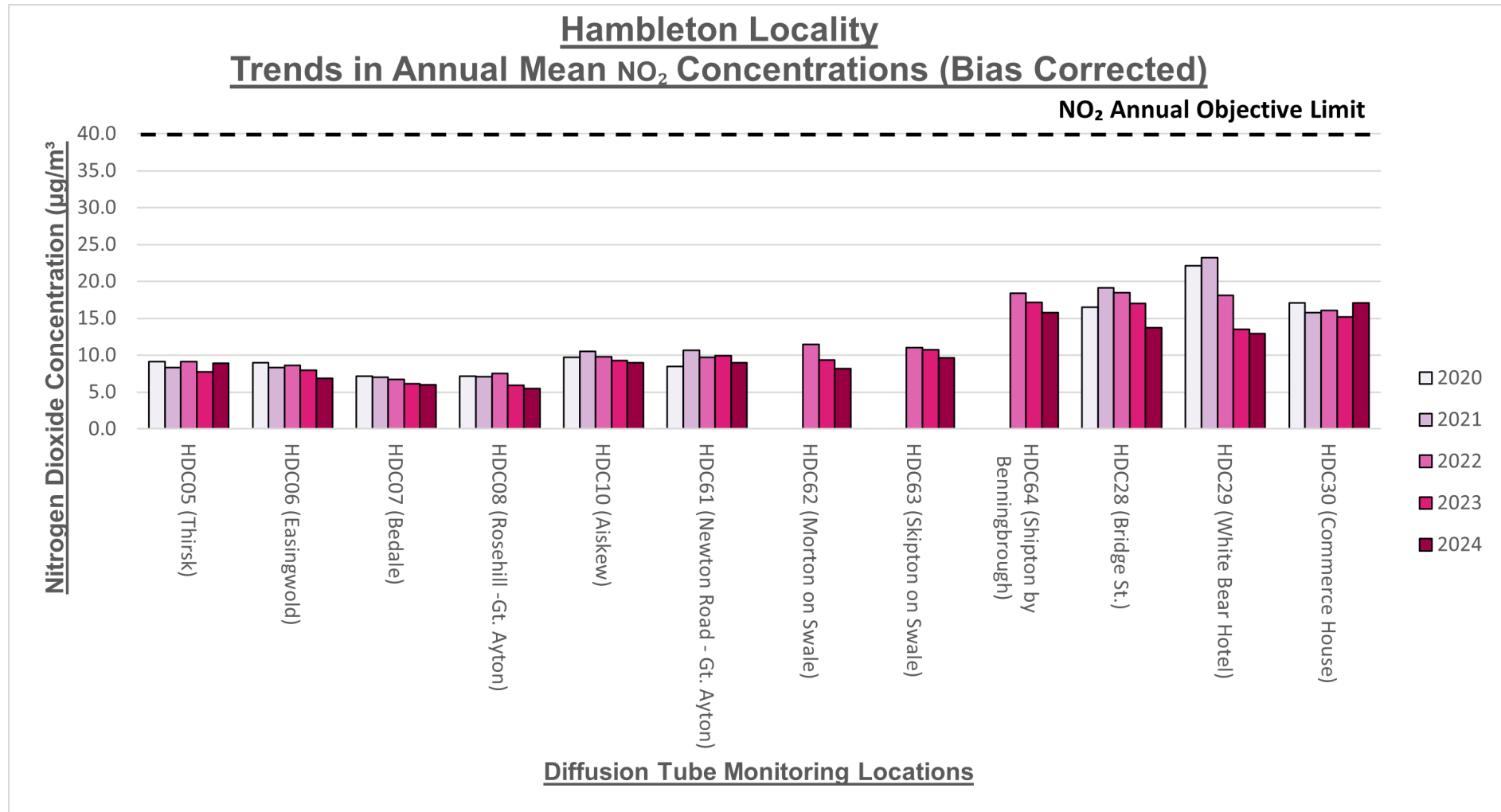


Figure A.3

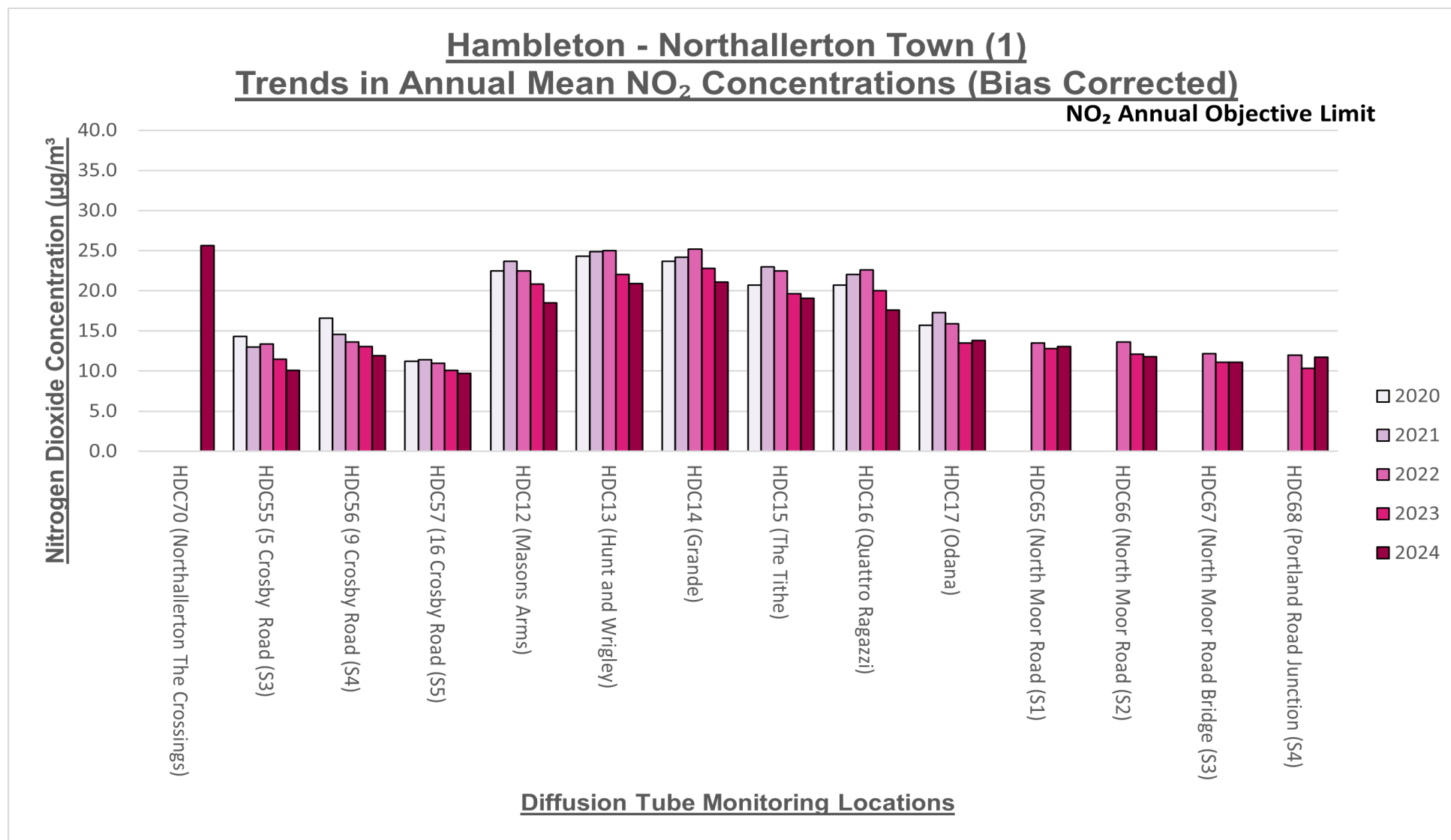


Figure A.4

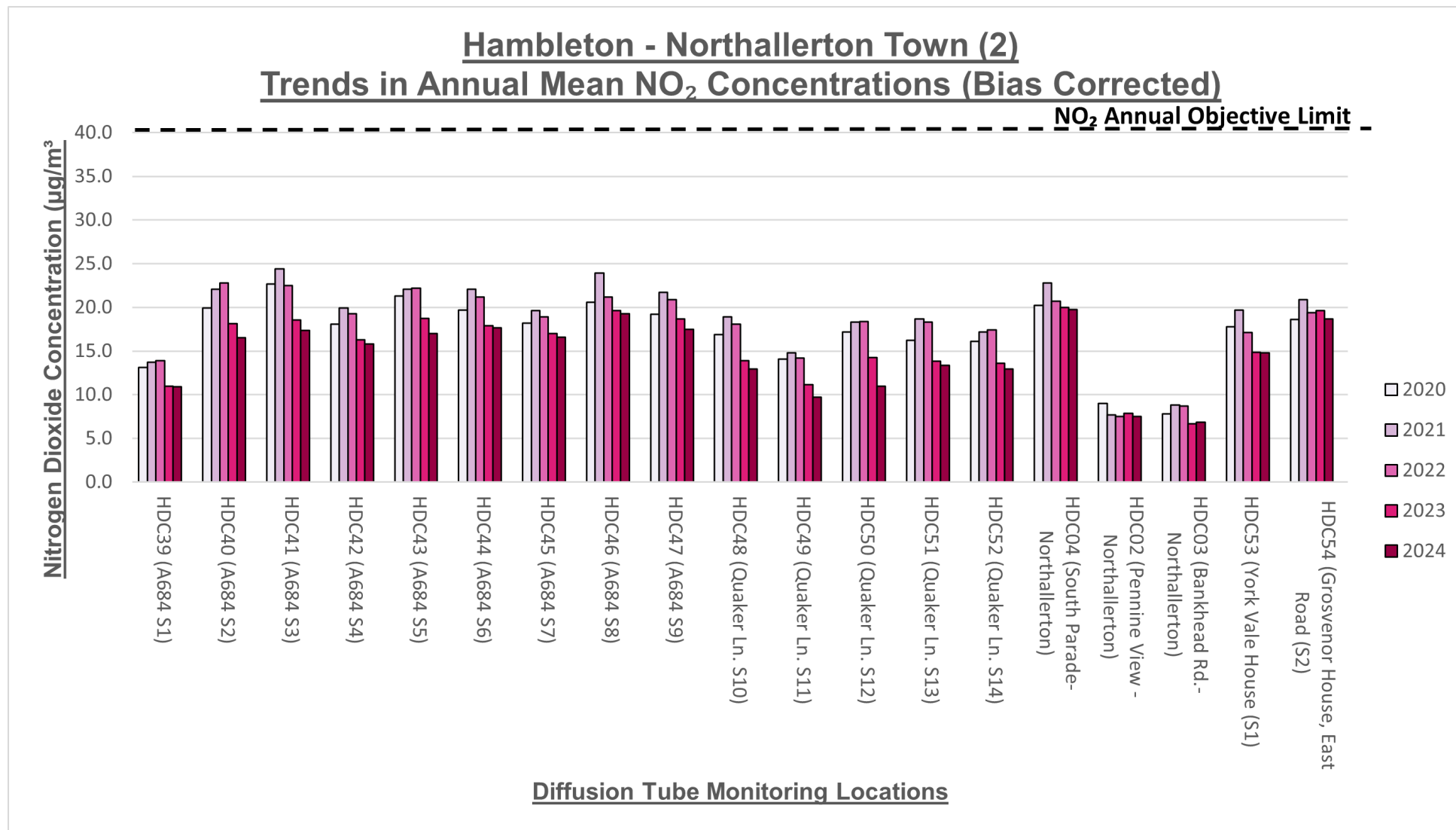


Figure A.5

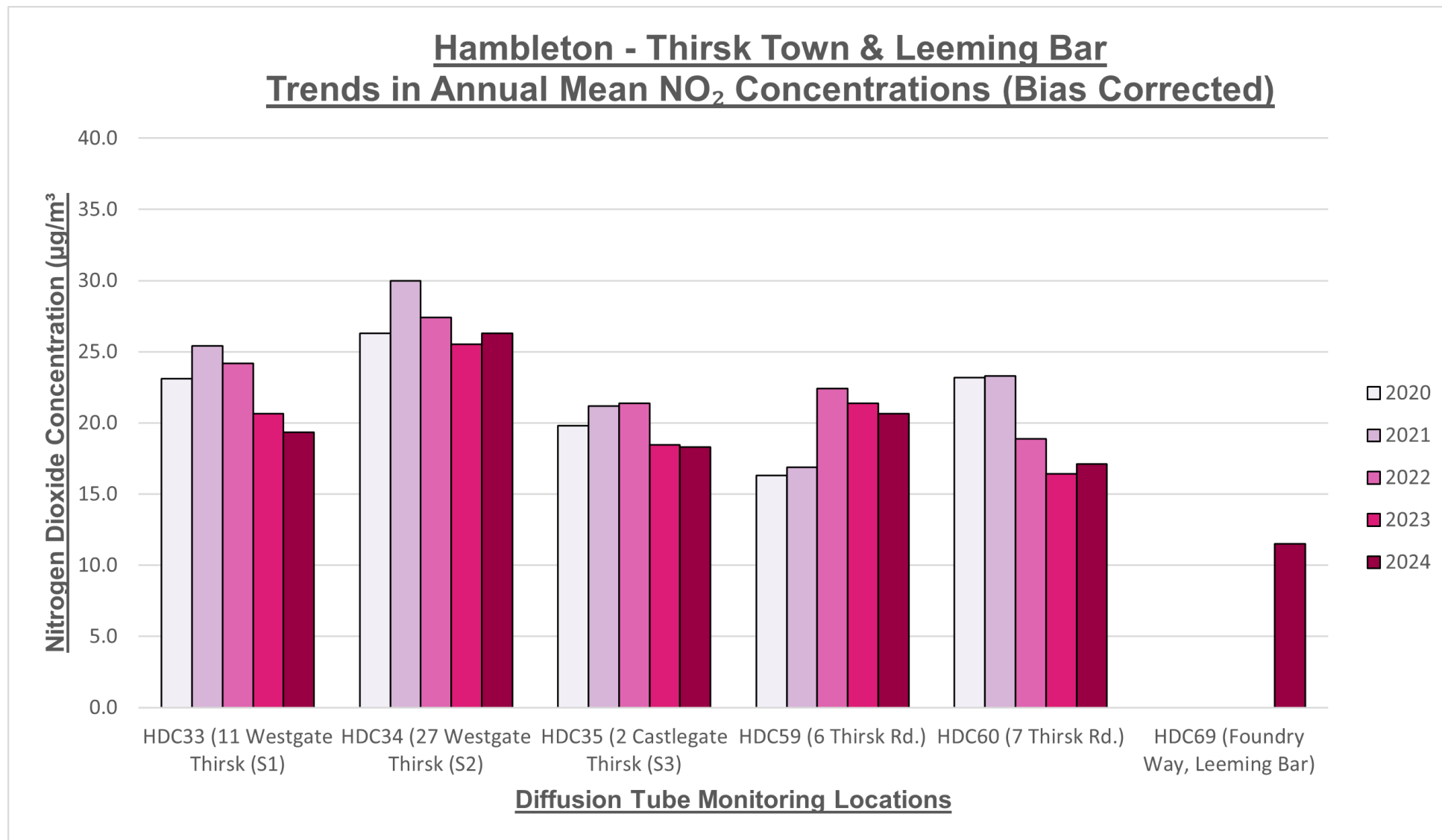


Figure A.6

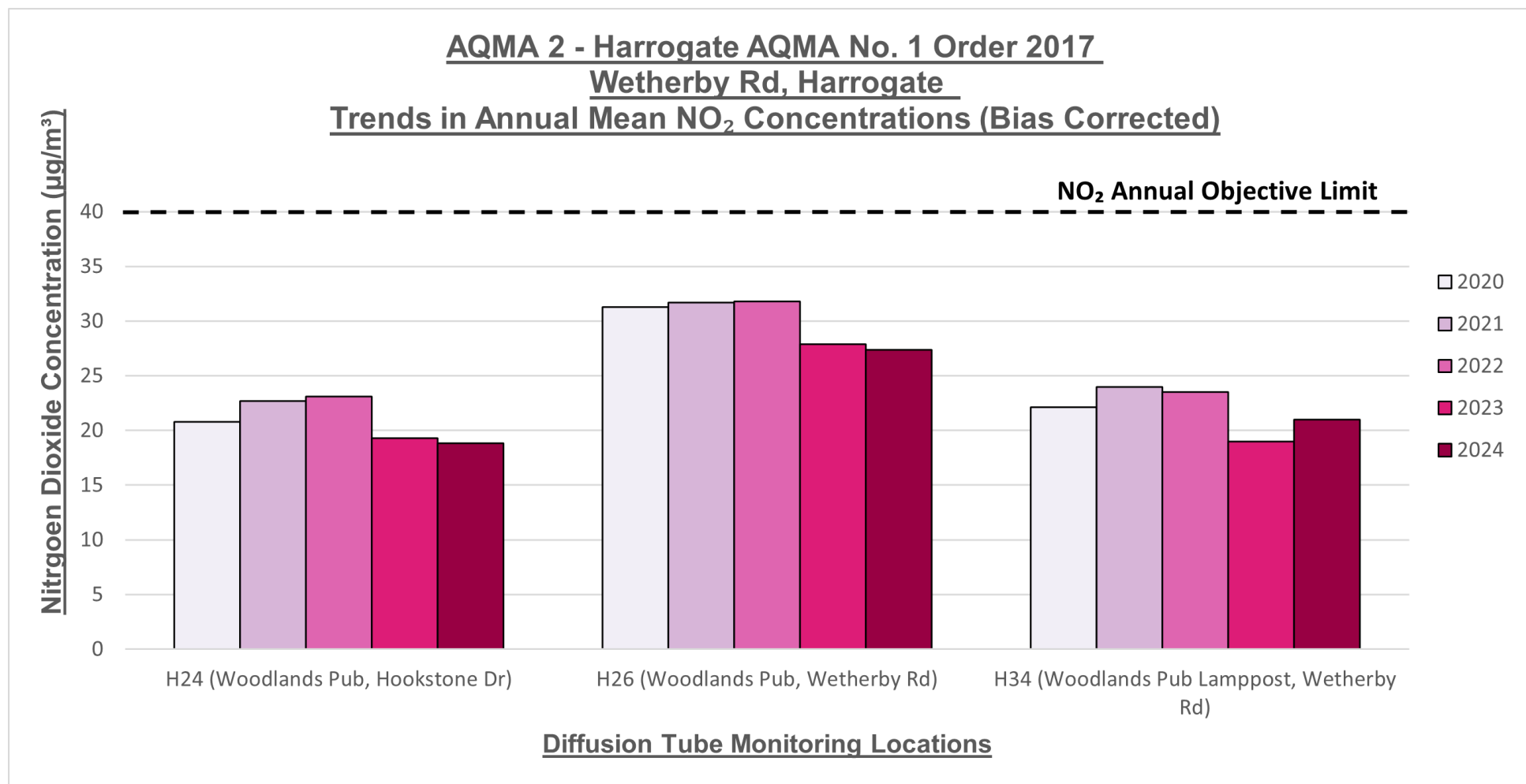


Figure A.7

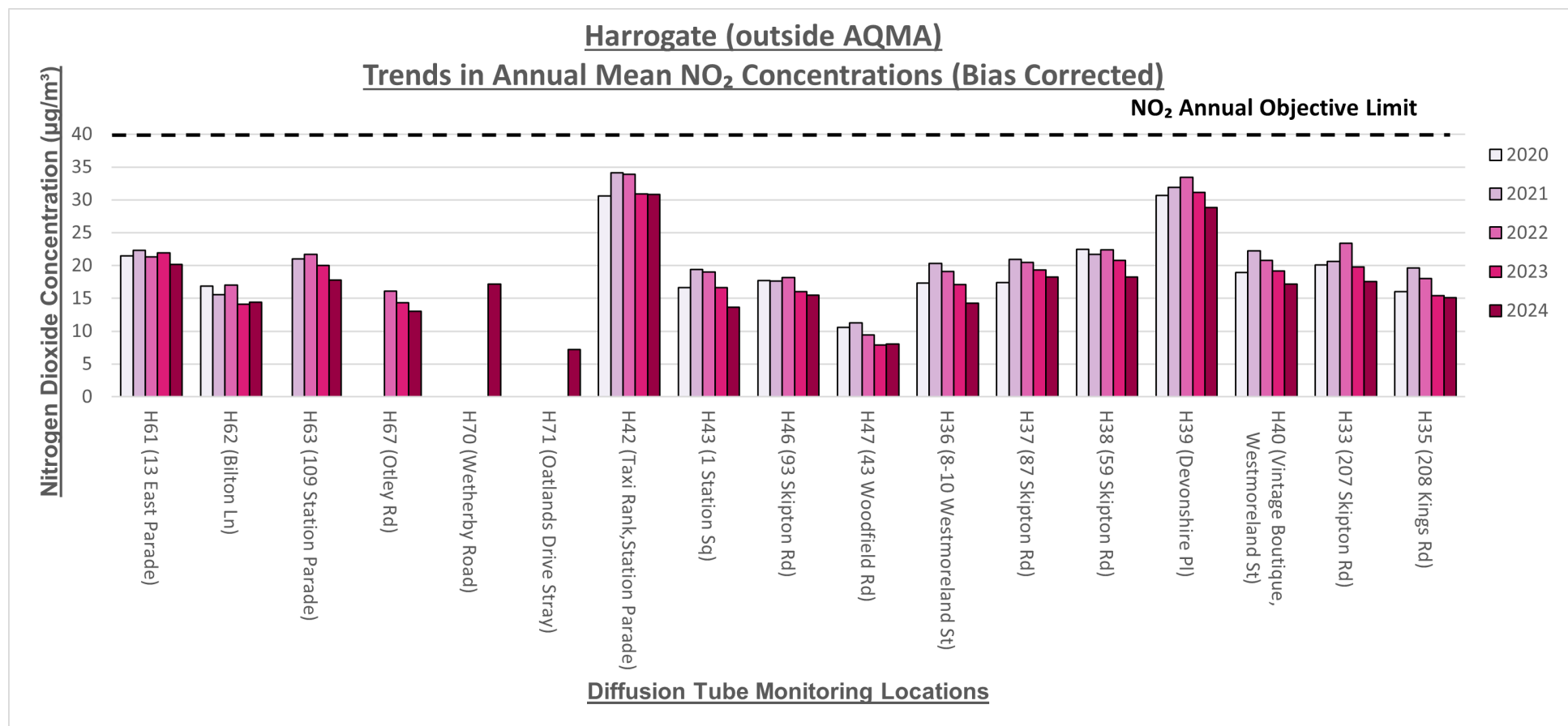


Figure A.8

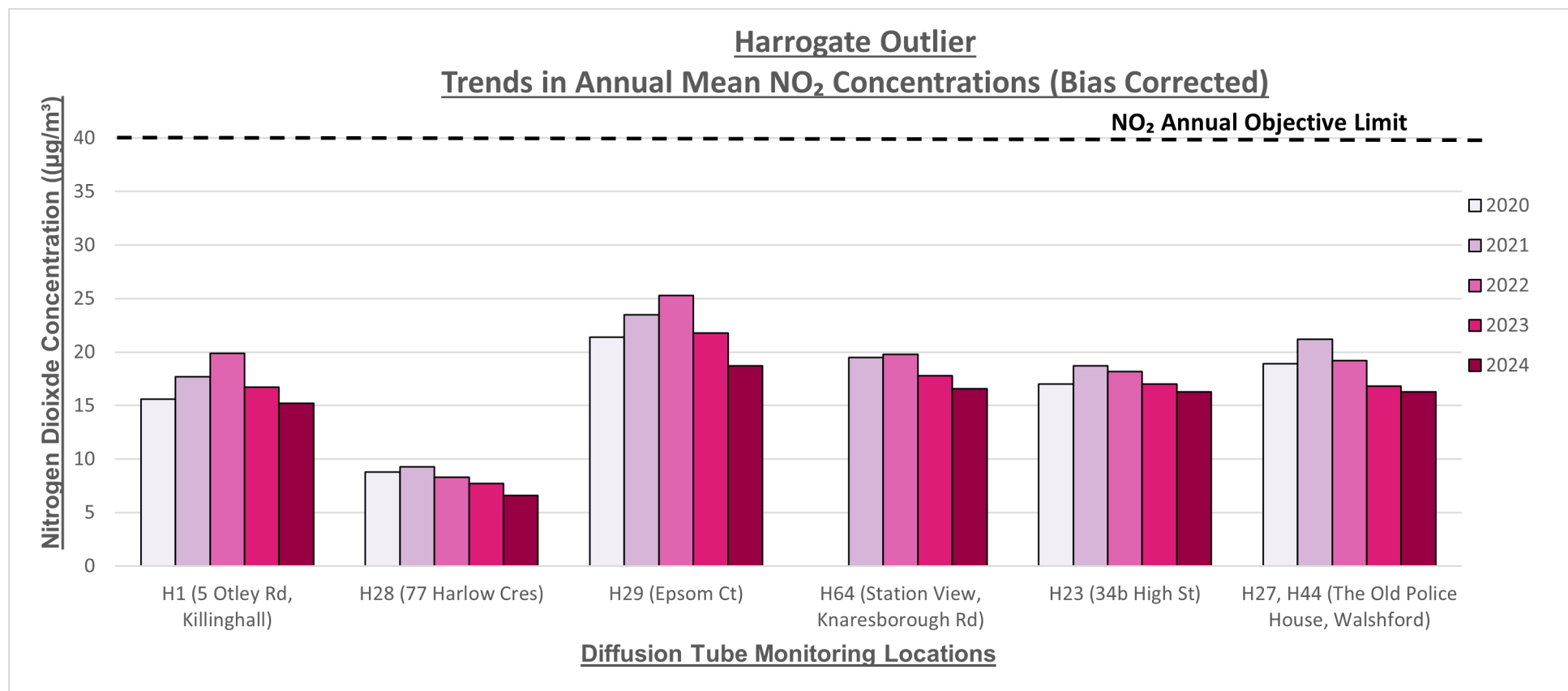


Figure A.9

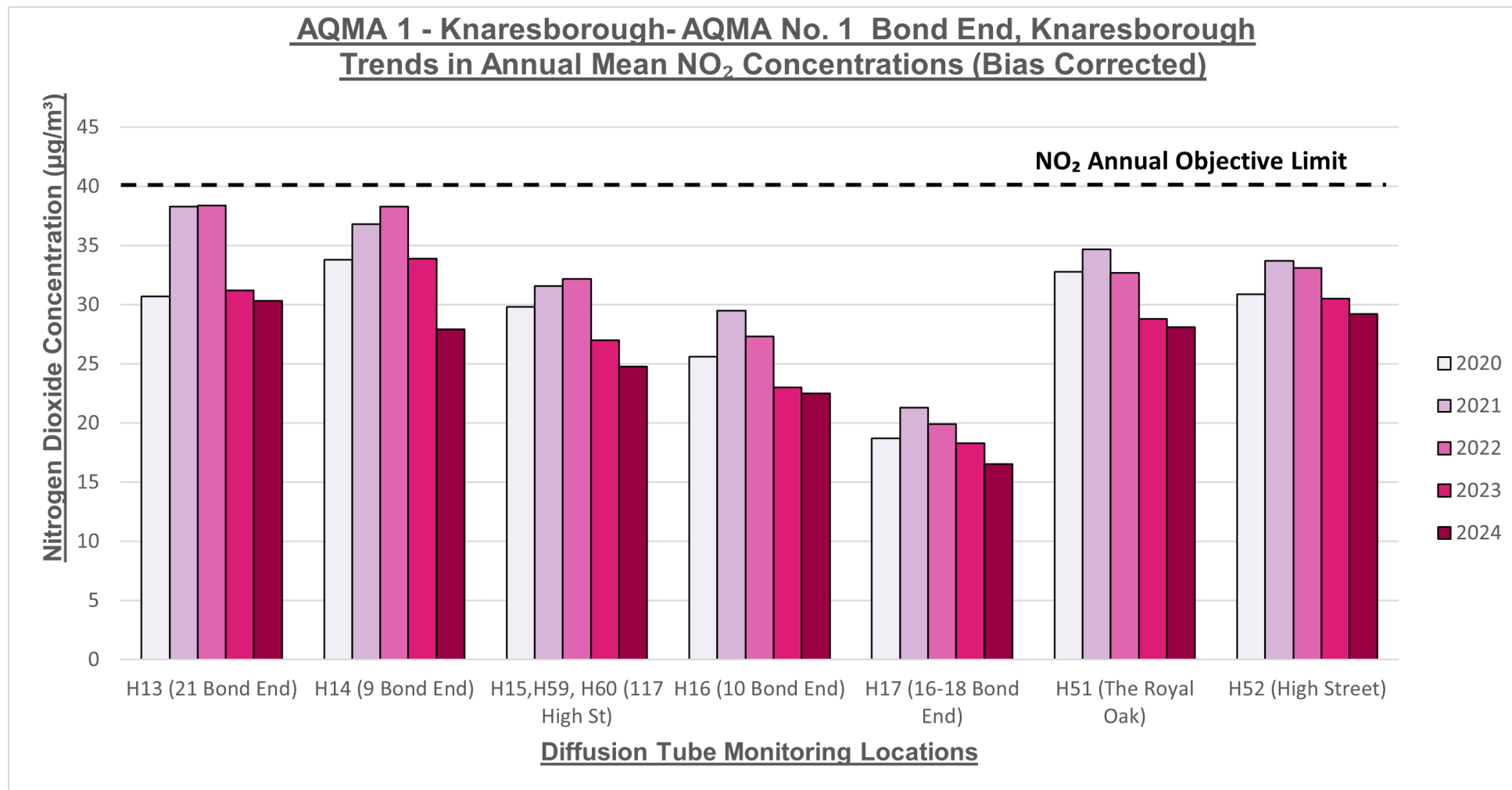


Figure A.10

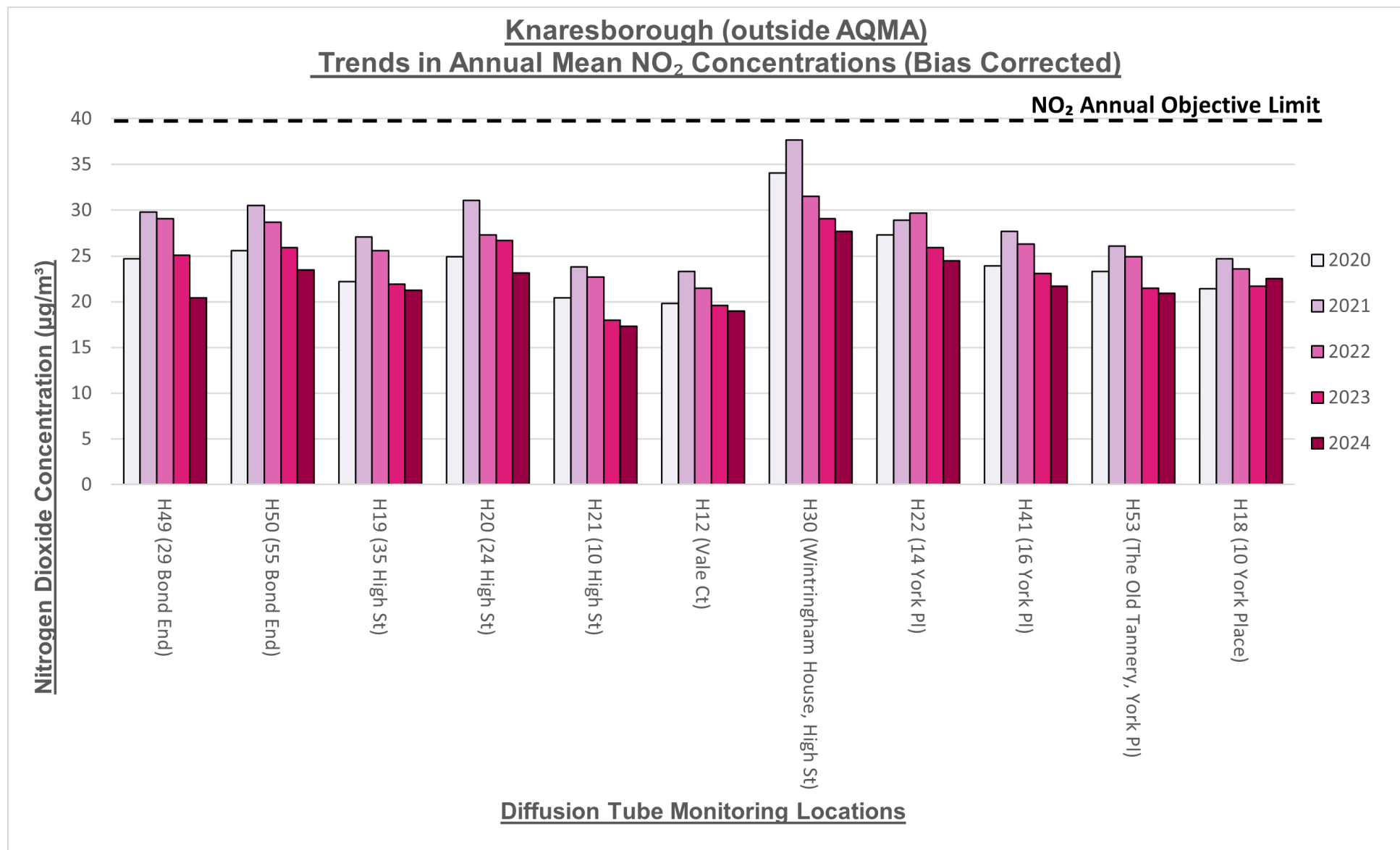


Figure A.11

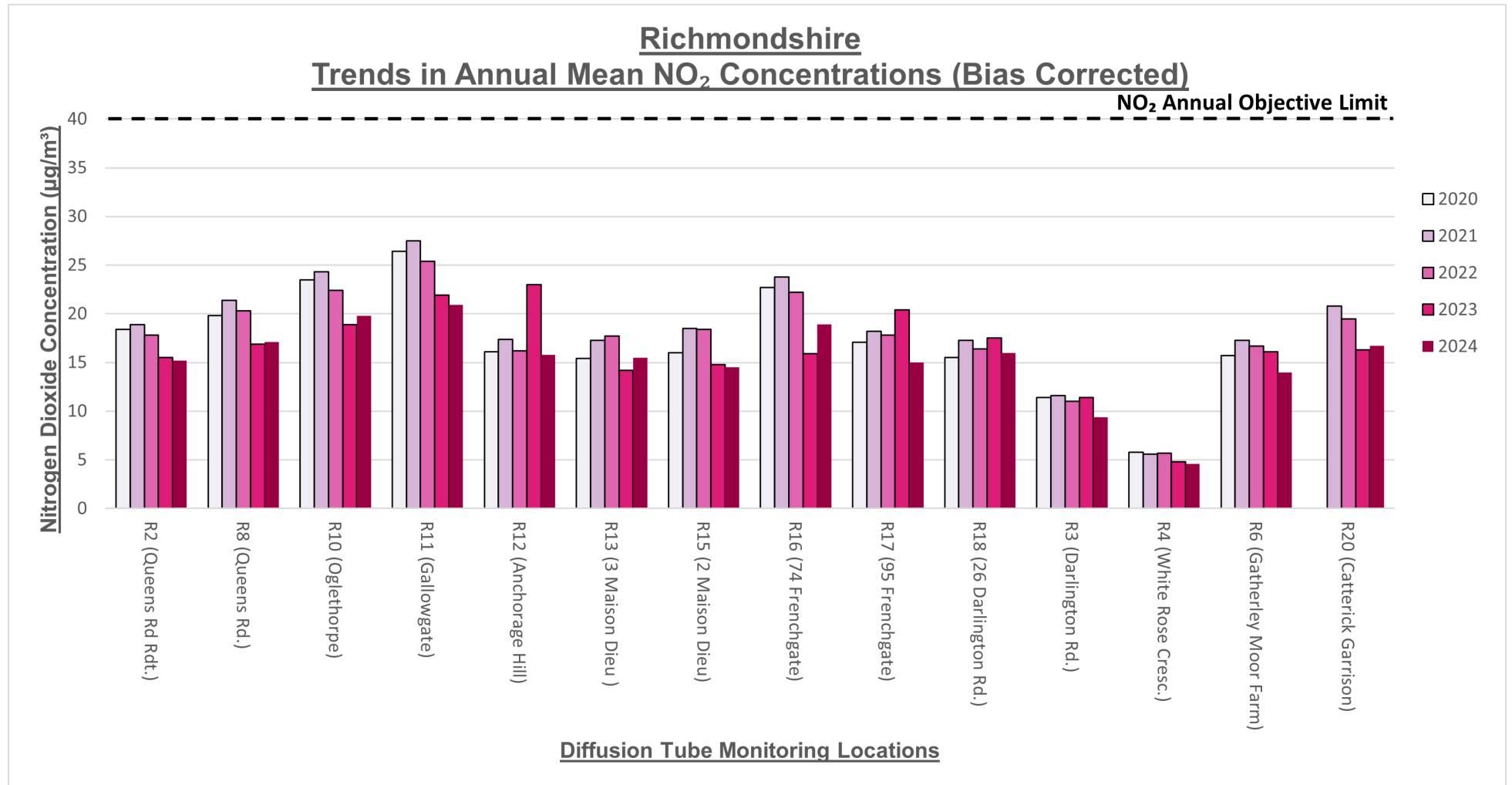


Figure A.12

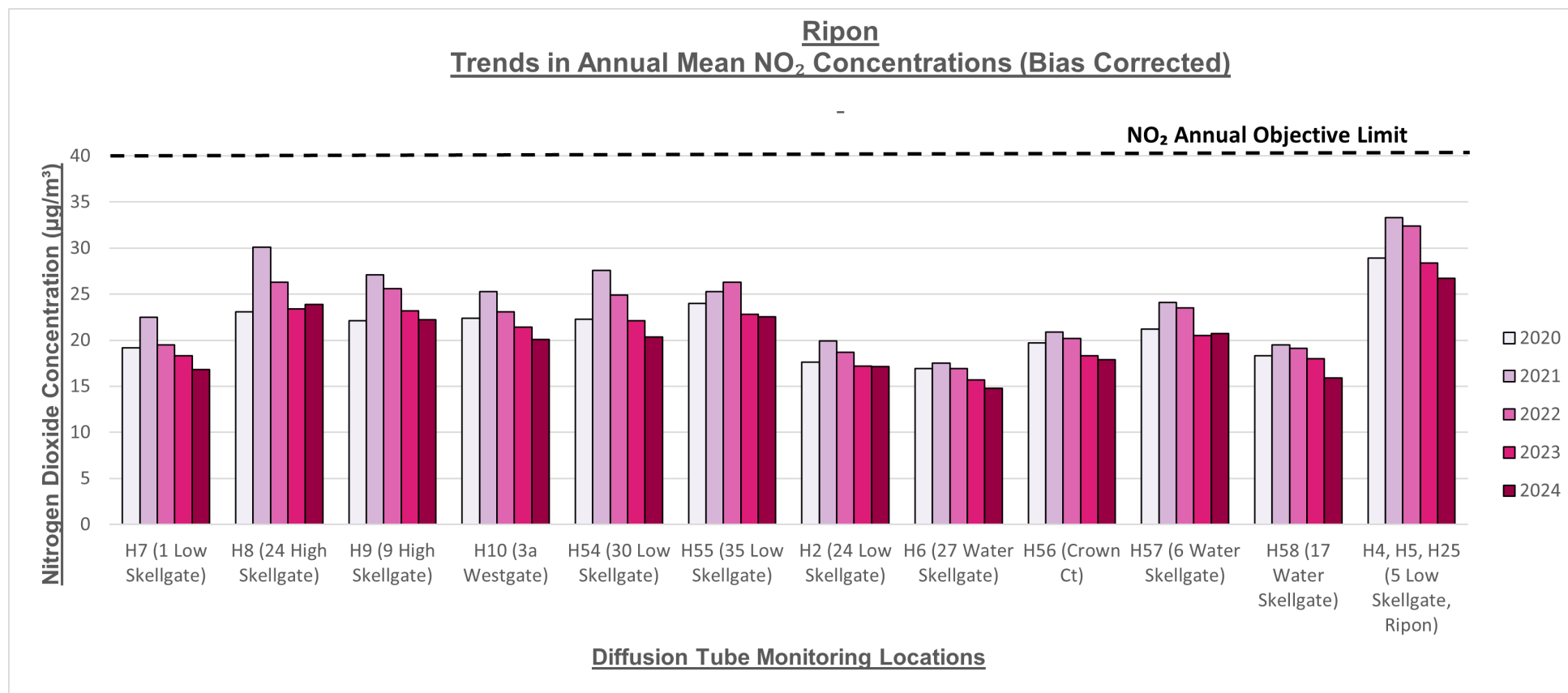


Figure A.13

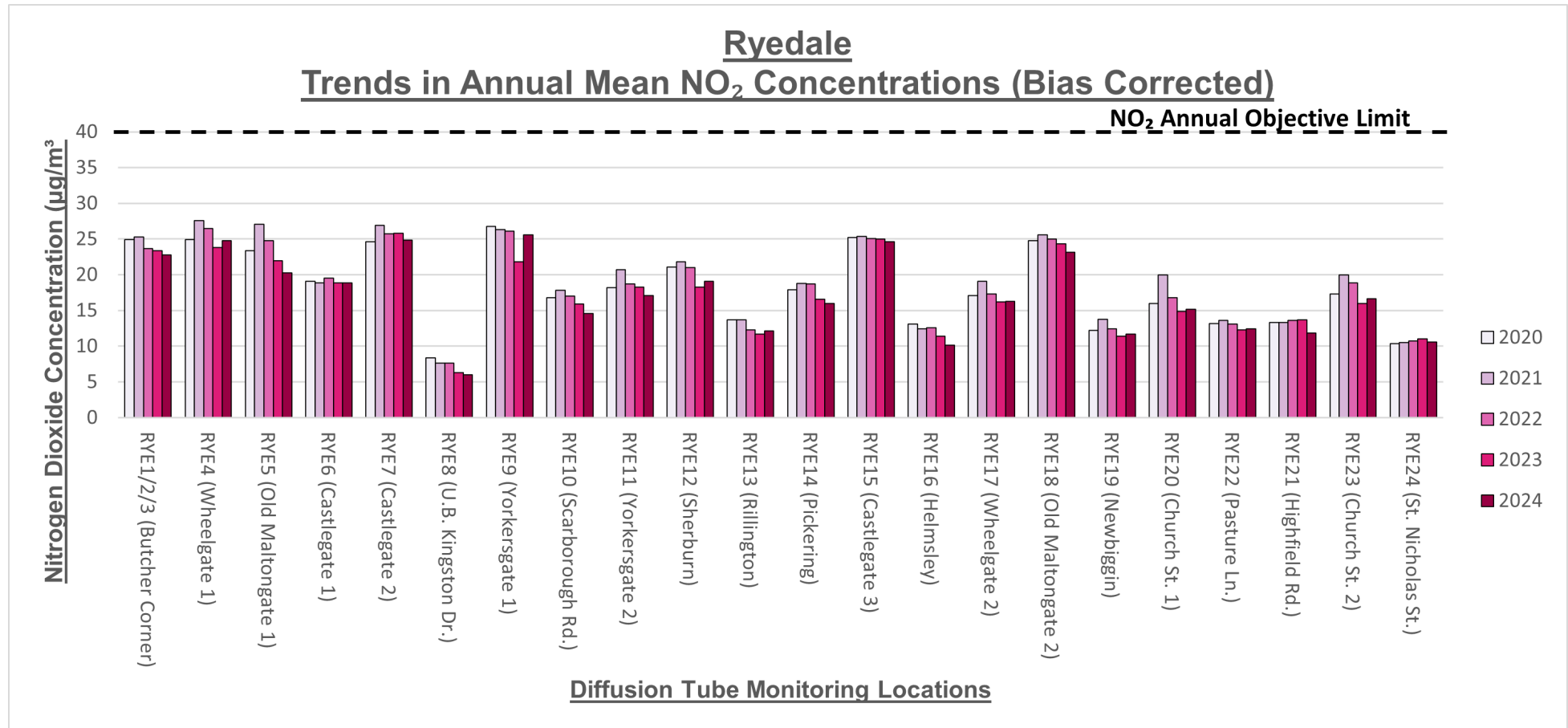


Figure A.14

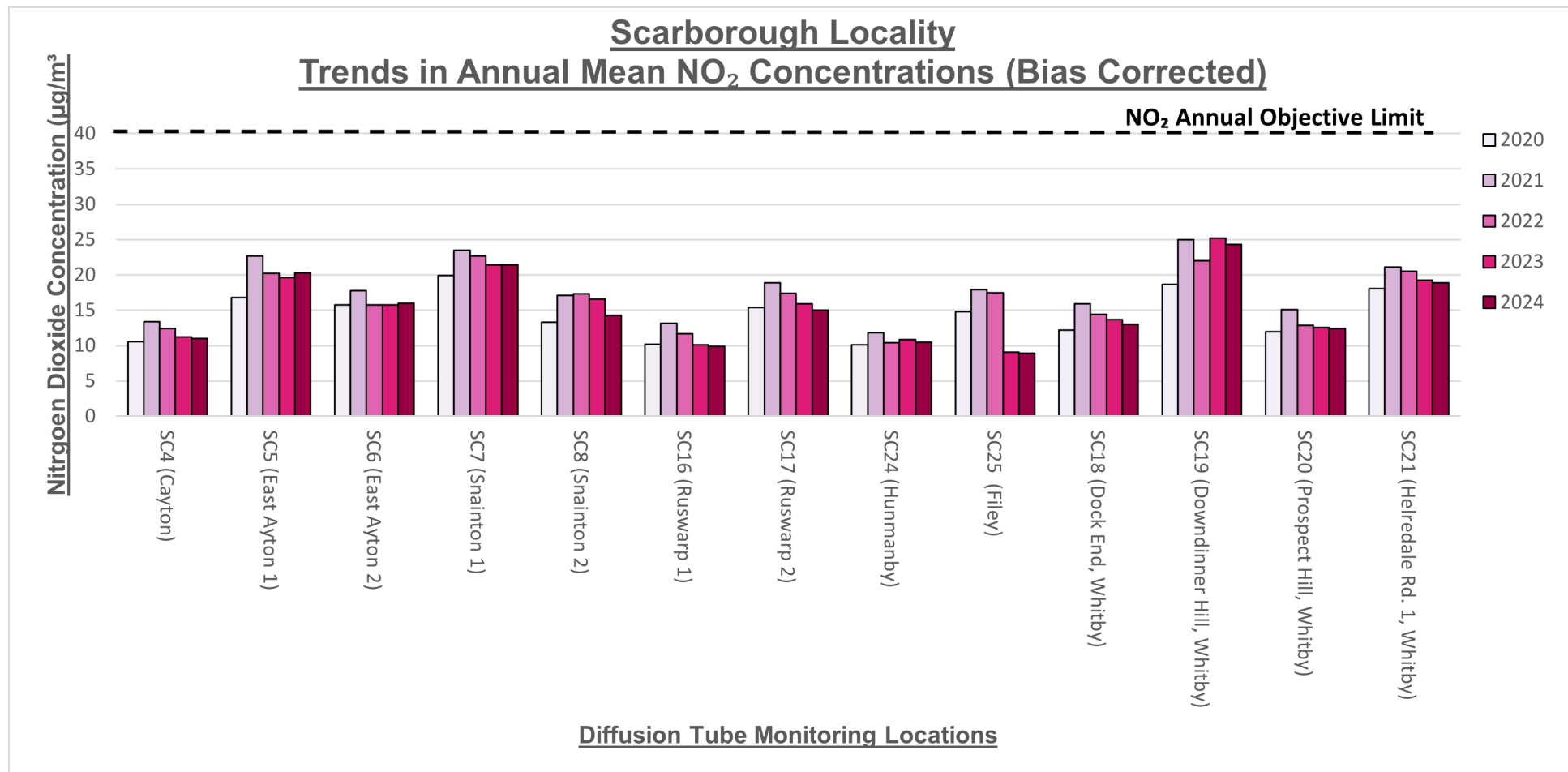


Figure A.15

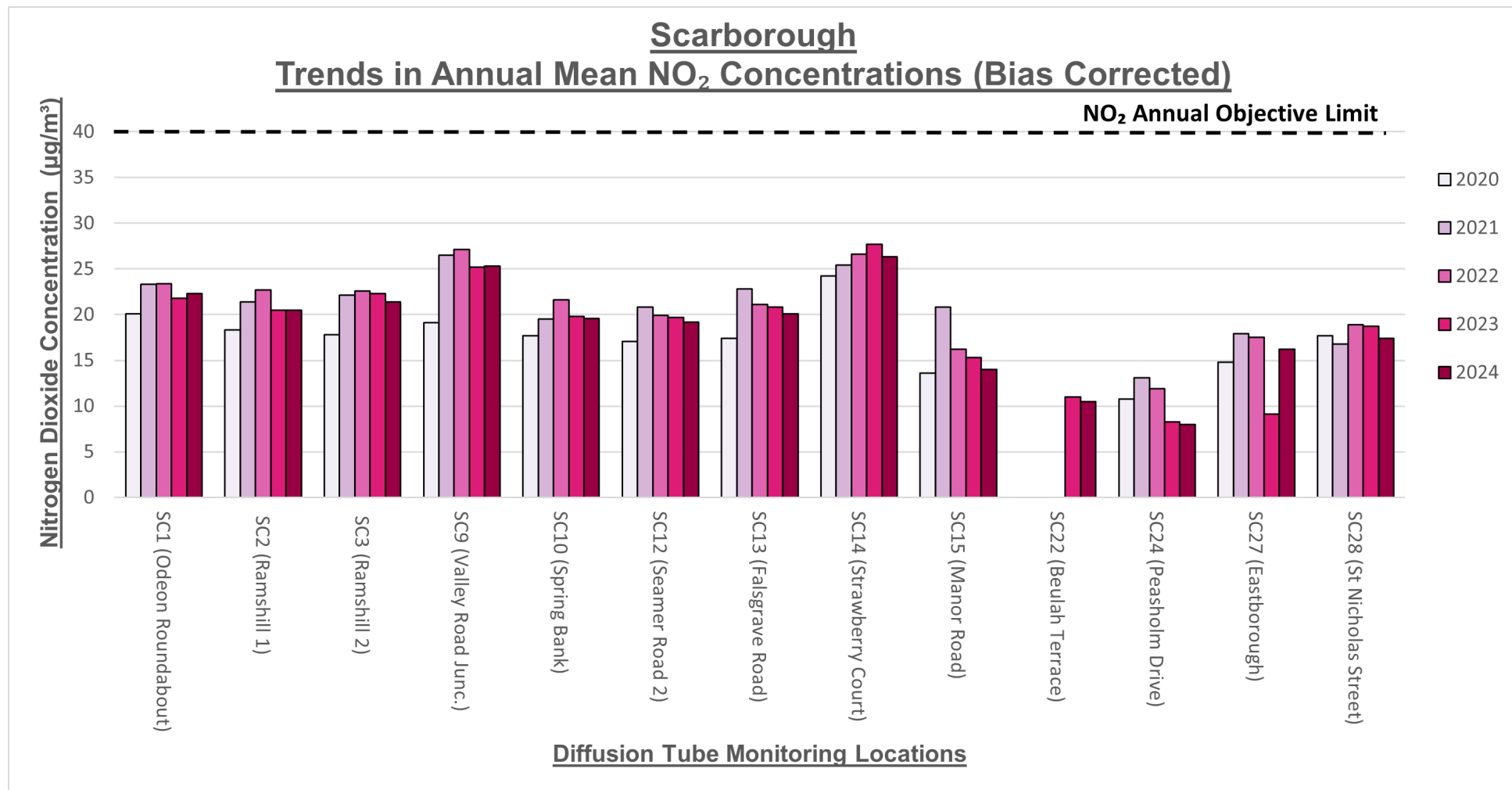


Figure A.16

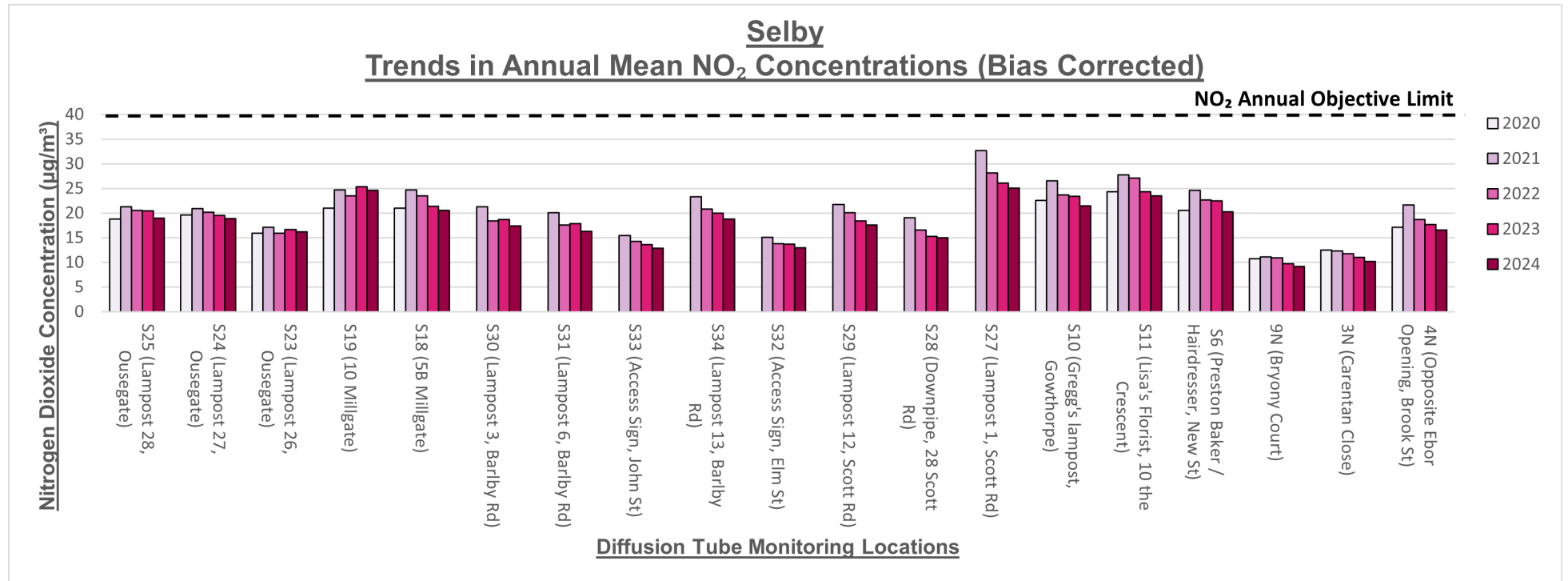


Figure A.17

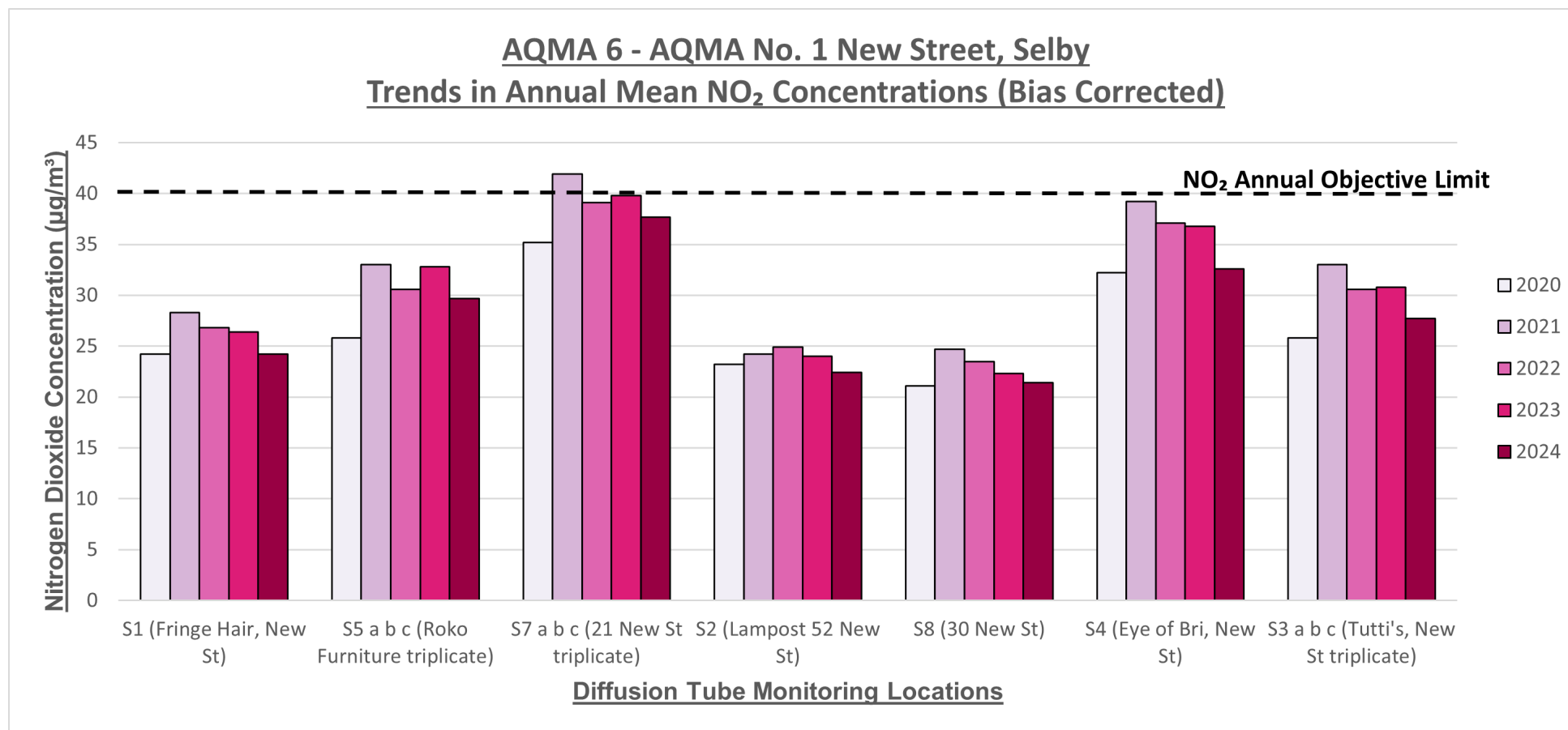
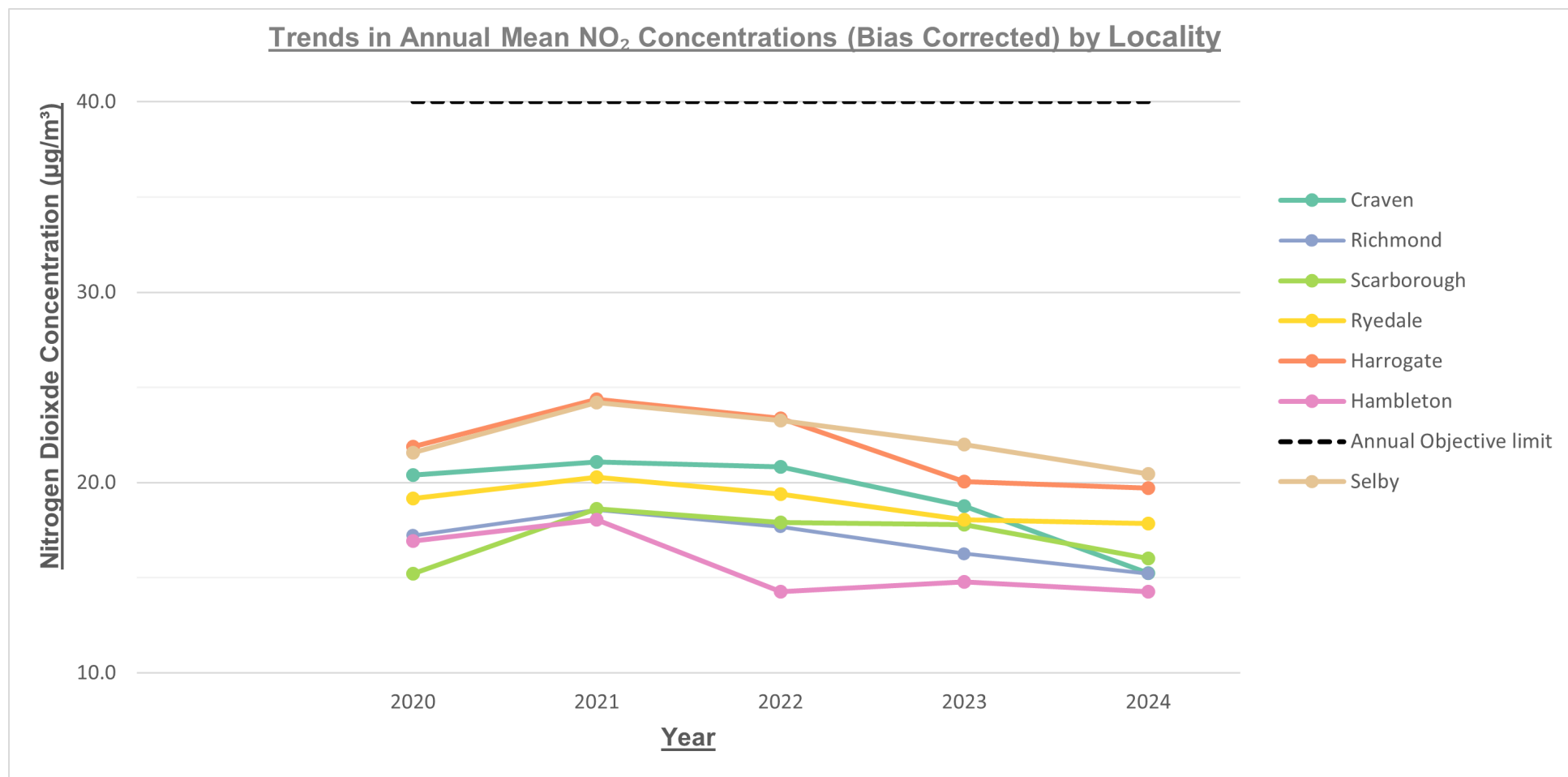


Figure A.18 – Annual Mean NO₂ Concentrations by Locality

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 (0.78) Socotec	Annual Mean: Distance Corrected to Nearest Exposure	Comment
R2	417180	501125	17.9	21.3	23.8	17.4	20.7	21.9	18.7	13.4	20.0	21.2	21.0	15.9	19.4	15.2	-	
R3	418066	501490	14.2	16.9	13.7	9.2	12.5	12.7	10.2	8.6	11.3	14.4	13.9	7.0	12.1	9.4	-	
R4	418504	501455	5.0	8.8	6.3	4.9	5.0	5.3	3.9	2.8	3.1	8.4	9.4	7.4	5.9	4.6	-	
R6	419207	506509	18.4	22.6	22.1	16.9	18.7	17.4	13.8	14.1	16.2	18.2	18.1	18.7	17.9	14.0	-	
R8	417179	501127	25.9		28.0	17.3	23.0	24.0	21.1	20.7	20.9	25.9	26.5	7.9	21.9	17.1	-	
R10	417381	501281	24.1	30.6	31.8	24.5	25.8	26.4	24.7	17.0	20.4	26.9	31.8	20.3	25.4	19.8	-	
R11	417377	501317	24.3	28.4	33.2	26.5	26.2	31.9	22.0	24.0	22.7	28.4	29.1	24.2	26.7	20.9	-	
R12	417542	501275	16.9	21.0	22.1	15.0	17.5	18.5	16.8	13.9	18.5	33.6	27.8	20.9	20.2	15.8	-	
R13	417536	501258	19.3	22.4	24.3	18.8	20.6	17.9	17.4	14.3	18.5	22.5	25.1	17.3	19.9	15.5	-	
R15	417500	501263	14.4	24.2	24.1	17.2	18.2	18.3	15.5	13.9	14.6	23.2	21.5	18.7	18.7	14.5	-	
R16	417451	501269	20.1	28.1	27.3	20.2	26.4	26.9	24.2	20.8	22.3	26.8	26.9	20.0	24.2	18.9	-	
R17	417370	501262	17.3	20.5	25.1	16.3	19.6	20.8	18.4	15.0	15.7	23.2	23.9	14.2	19.2	15.0	-	
R18	417661	501297	19.1	26.6	25.2	15.3	18.9	21.4	16.6	15.9	19.1	23.0	26.1	18.4	20.5	16.0	-	
R19	417312	501037	19.0	22.9	22.5	15.0	17.0	20.1	13.5	13.0	17.2	21.8	14.3	17.7	17.8	13.9	-	
R20	420754	498280	23.8	28.4	24.1	17.1	19.4	22.9	18.9	18.3	18.3	25.0		19.4	21.4	16.7	-	
HDC28	426733	488169	24.8	14.5	20.8	15.6	14.3	15.1	14.8	13.4	12.3	24.2	23.6		17.6	13.7	-	
HDC29	426702	488141	20.6	17.7	16.9	15.8	14.7	11.5	11.6	10.1	20.2	18.0	25.2		16.6	12.9	-	
HDC30	426681	488132	23.8	26.2	21.9	21.8	19.8	17.9		16.0	21.0	22.1	29.1		22.0	17.1	-	
HDC4	436558	493326	31.9	24.1	30.6	23.2	21.3	22.0	21.3	18.7	26.3	26.6	32.7		25.3	19.8	-	
HDC3	437714	493626	11.6	9.4	8.1	8.1	6.7	5.5							8.2	6.8	-	
HDC2	435858	492676	14.1	11.6	9.9	7.5	7.7	5.4	6.7	4.9	7.6	11.4	19.0		9.6	7.5	-	
HDC5	442384	481510	19.1	11.7	9.4	8.2	7.6	6.1	6.5		15.4	13.1	17.0		11.4	8.9	-	
HDC6	453011	469267		9.6	8.6	8.5	7.3	5.3	6.3	5.3	7.4	11.4	18.3		8.8	6.9	-	
HDC7	427096	487894	8.9	8.0	8.5	7.5	6.0	4.3	5.3	5.3	7.6	9.9	12.8		7.6	6.0	-	

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.78) Socotec	Annual Mean: Distance Corrected to Nearest Exposure	Comment
HDC8	456243	510859	11.5	4.3	7.1	7.5	6.3	4.8	5.4	4.2	6.0	7.8	12.9		7.1	5.5	-	
HDC10	427530	488821	13.8	11.9	12.5	11.1	11.4	8.2	8.5	5.4	12.1	12.8	18.9		11.5	9.0	-	
HDC61	456345	511088	11.6	14.2	11.0	12.5	10.3	9.8	10.3	8.3	8.5		19.0		11.6	9.0	-	
HDC62	432463	491936		12.5	11.7	8.7	9.7	7.7	8.1	8.5	7.8	12.6	17.7		10.5	8.2	-	
HDC63	436652	479787	12.3	14.4	12.1	11.6	10.2	10.0	9.0	8.4	11.6	16.3	19.9		12.3	9.6	-	
HDC64	455278	458663	32.9	21.2	19.6	17.3	17.3	12.6	13.7	13.7	17.2	23.1	34.0		20.2	15.8	-	
HDC53	437037	493967	27.3		17.9	18.3	18.5	15.6	14.2	16.1	13.4	21.6	26.9		19.0	14.8	-	
HDC54	437039	493873	29.6	27.5	23.4	23.9	22.6	20.2	17.9	16.2	21.5	25.7	34.6		23.9	18.7	-	
HDC55	437121	493879	20.2	15.7	13.4	12.4	9.9	7.8	10.3	9.6	9.0	16.0	17.9		12.9	10.1	-	
HDC56	437140	493852	21.4	18.2	15.3	13.2	12.1	8.9	11.9	13.3	12.3	16.7	24.7		15.3	11.9	-	
HDC57	437176	493762	19.4	13.1	11.3	10.6	10.4	9.1	9.3	7.8	9.4	14.0	22.4		12.4	9.7	-	
HDC12	436885	494104	25.1	24.2	23.1	25.2	24.7	18.4	18.4	16.5	27.0	23.8	34.2		23.7	18.5	-	
HDC13	436877	494087	35.5	34.7	29.7	25.7	23.9	21.8	21.1	24.3	17.5	31.5	29.2		26.8	20.9	-	
HDC14	436886	494091	26.8	34.2	30.8	26.0	23.8	20.7	22.0	21.6	22.2	32.4	36.9		27.0	21.1	-	
HDC15	436933	494101	31.0	31.0	24.7	24.0	21.8	16.9	18.7	19.9	18.8	26.5	35.1		24.4	19.0	-	
HDC16	436950	494105	29.6	30.2	16.7	17.0	20.9	19.1	18.6	22.9	19.5	27.5	25.9		22.5	17.6	-	
HDC17	436963	494107	18.8	21.0	25.6	22.2	14.2	13.1	13.0	13.5	14.2	14.0	25.4		17.7	13.8	-	
HDC65	436156	496385	23.7	19.9	17.5	14.3	11.9	12.0	11.6	12.1	14.4	19.6	27.3		16.8	13.1	-	
HDC66	436492	495337	19.8	17.1	15.5	12.5	10.4	8.6	10.5	12.9	11.8	18.2	29.1		15.1	11.8	-	
HDC67	437039	495291	20.5	12.8	14.0	12.1	9.9	10.1	10.2	12.0	9.4	20.1	25.5		14.2	11.1	-	
HDC68	437182	495273	22.1	15.7	14.9	12.3	11.8	10.4	9.9	9.7	11.0	18.8	28.6		15.0	11.7	-	
HDC39	437109	494970	21.7	16.7	13.7	13.5	11.7	8.7	9.7	13.0	11.2	12.8	21.2		14.0	10.9	-	
HDC40	437083	494958	22.1	25.8	21.5	21.0	21.8	18.0	18.4	13.6	20.0	24.1	26.7		21.2	16.5	-	
HDC41	436988	494596	31.2	28.4	22.7	21.7	19.7	14.6	16.3	15.0	14.6	26.4	33.9		22.2	17.3	-	
HDC42	436999	494584	26.0	23.3	20.7	19.3	17.2	15.0	16.5	16.2	15.2	24.5	29.2		20.3	15.8	-	
HDC43	436995	494515	27.7	19.7	23.3	22.5	20.1	19.0	17.1	18.3	18.2	26.7	27.3		21.8	17.0	-	
HDC44	436973	494436	32.8	30.4	23.7	23.0	19.9	12.8	16.8	19.4	18.9	24.3	27.2		22.7	17.7	-	
HDC45	436975	494395	27.6	24.7	18.1	23.1	20.8	14.4	14.1	14.6	20.7	25.0	30.4		21.2	16.6	-	
HDC46	436934	494296	32.6	30.6	23.6	26.4	23.5	18.8	18.4	17.5	23.0	30.4	27.1		24.7	19.3	-	
HDC47	436923	494220	25.6	27.8	21.5	22.5	22.7	15.7	16.3	15.3	19.7	25.6	33.5		22.4	17.5	-	
HDC48	436973	494519	26.4	16.7	17.2	17.4	19.3	13.5	10.5	10.0	13.5	20.8	17.5		16.6	13.0	-	

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.78) Socotec	Annual Mean: Distance Corrected to Nearest Exposure	Comment
HDC49	436907	494500	18.8	16.3	11.5	12.3	11.4	7.7	8.2	6.7	9.3	13.6	20.9		12.4	9.7	-	
HDC50	436717	494395	21.1	18.4	8.1	12.5	11.9	8.6	11.0	9.7	11.0	21.1	21.0		14.0	10.9	-	
HDC51	436691	494388	21.4	20.3	13.7	12.4	15.4	12.9	12.0	10.5	16.4	23.3	29.8		17.1	13.3	-	
HDC52	436680	494362	23.4	20.8	17.3	15.7	13.8	12.8	12.7	13.6	12.7	22.2	17.2		16.6	12.9	-	
HDC33	442783	481896	32.3	19.3	24.8	28.1	25.2	22.4	20.8	18.9	26.4	25.1	29.6		24.8	19.4	-	
HDC34	442815	481915	42.8	39.4	30.4		28.3	31.4	29.3	26.5	34.2	30.6	44.1		33.7	26.3	-	
HDC35	442871	481943	32.2	28.8	23.0	23.3	18.4	16.6	19.2	16.4	23.8	24.1	32.2		23.5	18.3	-	
HDC59	436893	493526	33.9	33.8	27.9	27.3	21.8	20.1	22.4	23.1	23.0	22.0	36.2		26.5	20.7	-	
HDC60	436879	493572	23.4	24.2	23.1	24.6	23.1	14.5	16.8	12.0	25.7	21.1	33.0		22.0	17.1	-	
HDC69	436461	493175	17.7	14.4	14.9	13.3	11.6	12.7	13.6	11.7	13.0	15.9	23.4		14.7	11.5	-	
HDC70	428885	490128								30.7	35.5	32.6	48.3		36.8	25.6	-	
RYE1	478739	471656	33.4	31.3	26.2	24.7		26.1	23.6	25.4	24.9	33.8	39.2		-	-	-	Triplicate Site with RYE1, RYE2 and RYE3 - Annual data provided for RYE3 only
RYE2	478704	471732	33.1		28.1	28.8	27.4	29.1	25.7	27.0	28.2	34.8	33.8		-	-	-	Triplicate Site with RYE1, RYE2 and RYE3 - Annual data provided for RYE3 only
RYE3	478844	471733	35.5	32.6	27.8	25.5	26.1	27.4	24.2	26.4	26.4	31.8			29.2	22.8	-	Triplicate Site with RYE1, RYE2 and RYE3 - Annual data provided for RYE3 only
RYE4	478843	471596	34.7	44.8	30.8	28.8	27.9	27.6	23.4	26.8	28.1	36.5	39.9		31.8	24.8	-	
RYE5	479028	471541		29.6	26.7	25.4	29.0	23.8	23.1	21.0	17.4	29.9	34.4		26.0	20.3	-	
RYE6	479869	470761	29.0	29.3	23.5	20.3	22.0	19.1		19.5	23.5	26.8	28.9		24.2	18.9	-	
RYE7	478661	471630		36.4	29.2	32.1		29.9	27.3	26.8	31.6	33.9	39.4		31.8	24.8	-	
RYE8	479668	471463	8.1	10.9	8.8	6.2	5.9	4.2		5.1	7.0	7.9	12.7		7.7	6.0	-	
RYE9	478552	471609	35.4	39.5	33.4		29.4	30.7	25.3	31.6	27.5	37.7	37.2		32.8	25.6	-	
RYE10	495854	476759	26.1	13.4	17.2	19.9	20.7	14.9	11.7	13.9	24.3	18.9	24.1		18.6	14.5	-	
RYE11	485362	474416	26.2	24.7	22.2	18.7	22.2	17.6	17.8	17.0	25.9	22.3	26.6		21.9	17.1	-	
RYE12	479942	483826	29.1	24.6	31.9	20.3	25.5	20.4	17.6	21.5	22.3	25.9	30.2		24.5	19.1	-	
RYE13	478927	471559	18.8	15.0	16.9	13.9	14.1			13.0	12.7	16.1	19.8		15.6	12.2	-	
RYE14	461282	483821	28.5	23.4	17.8	20.5	18.8	17.4	14.9	16.2	18.3	24.3	25.0		20.5	16.0	-	
RYE15	478608	471881	37.4	35.5	31.8	29.4	32.0	29.4	25.8	26.7	32.4	31.6	35.5		31.6	24.6	-	
RYE16	478911	471767	15.6	17.4	14.8	10.9	12.3	9.1	8.1	9.9	12.0	16.2	17.1		13.0	10.2	-	
RYE17	478440	472037	24.1	22.9	21.7	19.5	21.3	14.6	13.1		23.4	22.8	25.7		20.9	16.3	-	
RYE18	479120	471398	31.5	36.7	30.5	22.4	26.9	27.3	23.1	25.3	30.5	35.1	36.9		29.7	23.1	-	

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RYE19	479363	472468	19.1	12.2	15.0	17.2	13.1			8.3	13.7	15.7	20.3		15.0	11.7	-	
RYE20	478792	472377	25.3	24.8	20.1	15.9	16.8	14.7	12.9	15.6	17.8	23.0	26.9		19.4	15.2	-	
RYE22	479288	471386	21.8	17.5	14.3	14.3	14.1	13.2		11.6	12.2	20.1	20.2		15.9	12.4	-	
RYE21	479173	471281	19.8	20.1	10.1	14.0	11.9	13.7	11.2	11.0	14.1	20.1	21.3		15.2	11.9	-	
RYE23	479288	471386	26.3	24.5	20.9	17.9	20.6	16.4		14.2	19.6	23.8	29.6		21.4	16.7	-	
RYE24	479173	471281	23.1		13.9	11.8	9.3	9.0		7.7	10.2	16.2	20.6		13.5	10.6	-	
H1	428594	458666	21.1	22.0	17.8	15.3	16.1	15.3	17.0	19.2	17.7	26.7	25.5	20.5	19.5	15.2	-	
H2	431044	471039			27.2	22.1	20.8	14.9	15.7		22.2	25.7	28.9	20.0	21.9	17.1	-	
H4	431087	471100	42.8	41.6	32.9	36.4	37.0	33.2	30.7	29.2	33.4	33.8	24.2	34.5	-	-	-	Triplicate Site with H4, H5 and H25 - Annual data provided for H25 only
H5	431087	471100	44.8	41.8	39.6	38.7	35.8	33.1	30.3	29.4	28.2	36.9	20.1		-	-	-	Triplicate Site with H4, H5 and H25 - Annual data provided for H25 only
H6	431189	471146	28.4	23.8	15.0	19.7	18.5	15.4	13.3	14.0	14.1	17.8	23.4	23.9	18.9	14.8	-	
H7	431110	471124	21.9	19.5	25.7	23.9	19.9	18.7	16.8	20.6	17.8	27.5	26.2	20.5	21.6	16.8	-	
H8	431155	471216	31.2	35.7	34.3	30.9	32.7	27.5	22.4		22.0	35.5	34.8	29.5	30.6	23.9	-	
H9	431135	471186	31.3	31.0	29.3	30.0	29.0	24.7	25.1	22.6	23.3	26.5	36.4	32.6	28.5	22.2	-	
H10	431146	471258	21.7	25.1	28.1	26.8	29.0	19.4	21.8		22.1	30.4	28.1	30.5	25.7	20.1	-	
H12	434715	457387	30.9	27.1	23.2	24.8	23.9	24.6	21.7	19.9	26.2	24.2	28.0	17.7	24.4	19.0	-	
H13	434707	457368	47.6	47.9	46.0	38.4	33.4	38.4	34.0	42.1	34.1	34.3	38.8	31.5	38.9	30.3	-	
H14	434759	457375	34.5		24.2	40.5	39.2	40.7	36.7	39.1	33.9	42.0	38.8	24.0	35.8	27.9	-	
H15	434804	457358	30.9	30.1	33.7	31.5	27.6	36.9	28.2	32.6	26.5	27.1	37.2	28.0	-	-	-	Triplicate Site with H15, H59 and H60 - Annual data provided for H60 only
H16	434763	457388	34.8	29.3	34.0	30.0		24.3	24.4	23.3			33.2	26.5	28.9	22.5	-	
H17	434725	457405	23.6	23.3	25.1	23.1	22.9	16.6	15.9	19.5	25.6	21.6		15.8	21.2	16.5	-	
H18	435210	456918	35.4	32.9	30.5	27.6	24.2	30.3	27.7	28.0		27.5	32.1	21.8	28.9	22.5	-	
H19	435012	457084	32.1	31.5	31.4	24.9	24.1	27.7	23.3	26.5	18.7	33.2	30.9	22.6	27.2	21.2	-	
H20	435133	457009	33.0	34.3	35.8	29.7	30.9	24.8	25.0	23.6	31.6	32.5	32.0	22.9	29.7	23.1	-	
H21	435158	456992	31.6	18.3	19.8	24.7	22.0	22.7	20.8	18.8	19.8	14.8	30.4	23.0	22.2	17.3	-	
H22	435224	456913	32.8	29.9	34.2	31.6	31.0	36.0	31.8	30.6	26.7	34.0	29.4	28.4	31.4	24.5	-	
H23	432918	455959	22.1	27.8	24.3	20.5	17.9		13.8	17.3		23.6	20.6	20.8	20.9	16.3	-	
H24	432477	454805	28.0	27.5	28.0	23.3	23.8	20.8	21.6	18.5	19.4	26.7	28.6	23.7	24.2	18.8	-	
H25	431087	471100	41.9	42.5	40.8	33.7	37.0	32.8		25.8	33.7	34.0			34.2	26.7	-	Triplicate Site with H4, H5 and H25 - Annual data provided for H25 only

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H26	432494	454808	40.7				30.0	35.6	29.3	32.8	26.5	33.5		32.2	32.6	27.3	-	
H27	441851	453686	24.3	24.9	16.1	28.9	20.2	22.0	19.2		21.4	20.4	21.8	22.3	-	-	-	Duplicate Site with H27 and H44 - Annual data provided for H44 only
H28	429313	453820	10.9	9.0	8.5	7.3	6.6	6.2	5.3	6.9	6.2	12.1	10.4	11.9	8.4	6.6	-	
H29	429534	456882	30.2	25.6	31.4	27.1	25.2	22.6	23.8	23.6	15.4	22.1	26.9	14.3	24.0	18.7	-	
H30	435137	456968	39.6	45.2	34.6	31.3	31.4	43.1	35.7	40.1	22.4	37.9	29.1		35.5	27.7	-	
H33	430224	456727	27.0	26.9	24.4	19.2	16.7	19.3	20.7	22.5	15.9	29.4	28.1	20.3	22.5	17.6	-	
H34	432508	454804	36.1		26.2	24.5	28.0	20.0	22.4	18.0	31.4	26.2	33.1	30.2	26.9	21.0	-	
H35	430513	456467	23.3	26.3	23.9	17.9	17.6	16.0	15.6	15.4	14.6	25.5	19.6	17.0	19.4	15.1	-	
H36	430925	455804	20.7	20.7	20.6	18.2	17.1	15.9	14.8	16.7	16.9	22.5	23.2	12.0	18.3	14.3	-	
H37	430573	456436	27.5	25.2	23.2	22.9	20.7	24.9	21.7	21.8	17.6	24.8	26.7	24.0	23.4	18.3	-	
H38	430647	456324	25.8	31.1	25.9	20.1	19.5	23.6	21.2	23.4	11.5	28.3	29.0	21.3	23.4	18.2	-	
H39	430995	455831	51.3	30.7	40.6	41.1	41.8	29.3	31.7	25.1	39.4	37.3	45.2	30.5	37.0	28.9	-	
H40	430935	455826	23.6	26.0	20.7	21.8	22.3	20.6	17.7	18.8	21.7	22.9	30.8	17.8	22.1	17.2	-	
H41	435235	456907	36.4	13.4	29.7	29.1	29.4	33.2	26.8	25.7	25.1	27.4	31.9	25.4	27.8	21.7	-	
H42	430367	455339	48.6	45.2	42.7	39.1	38.7	43.1	38.1	34.8	30.3	26.5	48.6	38.5	39.5	30.8	-	
H43	430397	455194	17.9	20.3	24.2	18.0	20.0	15.4	15.2	14.5	17.3	12.0			17.5	13.6	-	
H44	441851	453686	23.0	23.6	15.8	20.2	20.3	22.5	19.4	20.6		14.1	17.1	21.3	20.9	16.3	-	Duplicate Site with H27 and H44 - Annual data provided for H44 only
H46	430535	456495	23.0	27.1	24.8	17.1	16.9	14.7	14.6	13.1	16.2	27.8	25.7	17.5	19.9	15.5	-	
H47	430800	456572	12.5	11.0	12.2	9.7	7.7		5.7	8.3	7.2	13.7	9.9	15.7	10.3	8.1	-	
H49	434623	457314	29.8		33.5	26.6	27.3	27.8	27.0	30.9	22.3	35.1	16.7	11.1	26.2	20.4	-	
H50	434578	457260	36.9	28.6	35.3	28.0	33.1	35.7	30.3		26.8		28.0	18.0	30.1	23.5	-	
H51	434796	457393	38.0	38.0	37.1	41.5			30.9	30.8	45.7	36.4	30.9	31.1	36.0	28.1	-	
H52	434835	457329	40.5	36.0	42.1	39.2	40.7	31.9	33.1	31.2	42.4	39.6	35.5		37.5	29.2	-	
H53	435253	456893		31.9	26.5	25.5	27.9	33.7	21.5	26.4		25.9		22.4	26.9	20.9	-	
H54	431075	471077	22.4	33.6	34.7	27.2	25.8	19.4	21.0	20.9	24.9	24.5	29.7	28.9	26.1	20.3	-	
H55	431102	471101	33.7	33.7	32.8	27.5	24.0	25.4	22.8	26.7	20.0	34.2	32.6	33.1	28.9	22.5	-	
H56	431151	471119	28.6	27.9	28.6	20.7	20.5	20.4	16.3	21.1	17.4	26.1	28.1	19.7	23.0	17.9	-	
H57	431193	471132	32.3	33.0	27.4	28.4	23.3	25.6	19.2	22.6	19.7	31.0	29.1	27.5	26.6	20.7	-	
H58	431242	471135	27.4	18.6	21.3	21.4	18.7	21.1	16.7	19.4	14.2	21.9	25.1	18.9	20.4	15.9	-	

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H59	434804	457358	35.1	35.7	32.3	30.3	29.4	37.9	28.7	32.1	23.9	34.5	33.8	24.2	-	-	-	Triplicate Site with H15, H59 and H60 - Annual data provided for H60 only
H60	434804	457358	37.2	36.0	31.0	32.2	28.0	34.5	31.0	33.7	23.0	40.1	35.8	31.9	31.7	24.8	-	Triplicate Site with H15, H59 and H60 - Annual data provided for H60 only
H61	430478	455297	29.3	23.8	28.2	25.7	23.5	24.7	23.1	22.8	20.5	31.2	34.3	23.2	25.9	20.2	-	
H62	430420	456798	22.4		22.2	18.7		14.6	14.6	16.1	15.9	20.4	22.9	16.6	18.4	14.4	-	
H63	430548	454832	26.1	24.2	26.4	21.7		18.5	18.9	20.9			22.8		22.4	17.8	-	
H64	432806	455899	22.2	29.4	26.1	20.0	17.6	17.2	14.5	20.0	15.1	25.2	25.0	22.5	21.2	16.6	-	
H67	429503	454275		14.9	17.6	17.1	15.8	14.6	16.0	13.1		20.5	21.1	16.0	16.7	13.0	-	
H70	431592	455297						15.6	18.7	15.6	28.8	27.7	22.4	25.6	22.1	17.2	-	
H71	431175	454782						8.1	6.2	8.6	8.8		10.0	10.5	8.7	7.2	-	

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9N	460899	430935	15.6	15.9	10.9	7.9	7.6	8.5	8.5	9.2	8.7		16.5		10.9	9.2	-	
4N	461096	432191		24.0	19.2	17.8	17.4	16.7	16.9		18.2		28.0	19.2	19.7	16.6	-	
3N	460855	432820	16.4	18.5	12.3	7.9	8.6	8.3	9.9	9.9	7.2	15.9	19.0		12.2	10.2	-	
S6	461635	432372	30.8	28.5	24.5	23.0	22.0	20.8	21.4	19.7	28.3			22.5	24.1	20.3	-	
S5a	461659	432405			34.4	34.7	30.4	35.2	33.4	31.9	39.9	34.3		34.7	-	-	-	Triplicate Site with S5a, S5b and S5c - Annual data provided for S5c only
S5b	461659	432405			35.5		30.5		32.1		39.6	36.4	39.1		-	-	-	Triplicate Site with S5a, S5b and S5c - Annual data provided for S5c only
S5c	461659	432405	37.4		35.2	33.9	29.5	33.4	32.9	32.0		38.6	43.0	37.0	35.4	29.7	-	Triplicate Site with S5a, S5b and S5c - Annual data provided for S5c only
S7a	461688	432434	48.5	55.2	44.6	42.4	34.7	42.0	41.0	39.4	41.4	45.3	56.1	45.0	-	-	-	Triplicate Site with S7a, S7b and S7c - Annual data provided for S7c only
S7b	461688	432434		60.0	44.2	39.7	33.3	42.7	41.6	38.7	41.8	46.5	45.3	42.4	-	-	-	Triplicate Site with S7a, S7b and S7c - Annual data provided for S7c only
S7c	461688	432434	45.0	88.1	45.5	40.4	35.9	40.9	40.5	38.7				46.3	44.9	37.7	-	Triplicate Site with S7a, S7b and S7c - Annual data provided for S7c only
S2	461689	432422	32.8	35.8	30.6	23.0	21.0	23.0	22.7	24.3	22.7	29.9		27.2	26.6	22.4	-	
S8	461697	432424	29.2	31.9	27.5	25.0	19.5	20.6	21.3	22.3	20.0	31.3	32.1	24.8	25.5	21.4	-	
S4	461681	432407	42.8	49.6	45.1	39.7	28.6	38.9	39.7	36.1	39.1	44.5	42.6	18.5	38.8	32.6	-	
S3a	461670	432408	36.5	37.4	36.3	28.3	25.2	31.6	31.6	30.8	35.6	37.4	35.8	31.2	-	-	-	Triplicate Site with S3a, S3b and S3c - Annual data provided for S3c only
S3b	461670	432408	35.5	38.4	37.3	30.1	24.7	30.6	30.0	31.7	33.8	37.0	36.2	28.4	-	-	-	Triplicate Site with S3a, S3b and S3c - Annual data provided for S3c only
S3c	461670	432408	35.4	40.6	35.3	30.9	24.2	31.7	31.2	30.7	33.1	38.0	36.4	28.3	33.0	27.7	-	Triplicate Site with S3a, S3b and S3c - Annual data provided for S3c only
S1	461638	432345	30.0	33.9	31.4	25.1	20.9		26.9	27.5	26.6	33.9	35.7	25.4	28.8	24.2	-	
S11	461507	432319	29.7	34.2	30.9	24.7	23.6	25.0	25.1	24.8		33.8	30.4	25.6	28.0	23.5	-	
S10	461317	432356		30.7	24.6	23.8	24.6			21.4		26.0	33.6	29.8	26.8	21.5	-	
S27	461120	432303		35.6	30.0	28.4	27.3		28.4	24.6	24.8	31.7	35.8	32.2	29.9	25.1	-	
S28	461062	432475	22.3	21.2	16.1	14.6	17.0	16.2	13.9	14.2	17.0	19.7	22.3	19.3	17.8	15.0	-	
S29	461041	432539		27.3	21.2	18.5	19.2	17.9	19.1	18.8	14.6	25.6	28.2	20.6	21.0	17.6	-	
S32	461871	432643	19.1	21.8	16.4	10.5	10.4	19.5	11.1	11.8	11.0	18.1	20.2		15.4	13.0	-	
S34	461938	432710	27.6	28.9	24.1	18.7	17.1	17.4	17.8	18.4	20.7	23.8	31.6		22.4	18.8	-	
S33	461935	432672	19.0	20.4	15.9	12.2			11.2	13.0		17.8	21.8		16.4	12.9	-	
S31	461852	432594	24.3	27.2	20.1	16.7	14.9	14.9	14.7	17.1	18.4	22.0	23.8		19.5	16.3	-	

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.84) Gradko	Annual Mean: Distance Corrected to Nearest Exposure	Comment
S30	461806	432546	29.9	27.6	21.7	17.9	14.8	15.6	16.5	17.2	18.4	22.9	26.1		20.8	17.4	-	
S18	461517	432582	26.1	30.5	23.9	21.0	23.4	22.8	20.5	25.2	19.1	27.8	30.5	23.3	24.5	20.6	-	
S19	461526	432584	33.2	31.5	29.4	28.3	29.3	24.6	25.0	27.1	30.3	33.9	32.3	26.1	29.2	24.6	-	
S23	461821	432376	24.9	25.5	18.5	15.3	15.5		14.1	16.2	14.4	21.7	26.7		19.3	16.2	-	
S24	461788	432379	24.8	29.6	23.8	19.3	17.6	19.0	18.4	21.6	16.4		33.3	23.2	22.5	18.9	-	
S25	461762	432408	26.6	27.5	21.5	20.2	23.2	18.9	18.5	18.9	19.5	24.9	28.4	24.0	22.7	19.0	-	
S35	461617	432148	28.7	28.4	25.2	20.8	21.8	18.6	19.4	19.7			27.1	23.3	23.3	19.6	-	
C1	366749	469197	16.2	17.4	13.8	13.9	13.7	13.1	13.6	11.0	15.2	15.4	19.1	17.5	15.0	12.6	-	
C2	381959	463625	19.1	23.5	18.4	16.9	17.0	13.3	14.0	13.5	12.7	19.0	22.2	17.2	17.2	14.5	-	
C3	399103	451611	23.6	31.2	20.6	18.4	19.1	18.5	18.8	17.7	15.7	25.0	30.2	24.1	21.9	18.4	-	
C4	398820	451196	18.1	23.0	18.7	15.3	15.4	11.3	12.1		17.4	19.5	22.9	17.1	17.3	14.6	-	
C5	400629	444999	22.7	35.8	27.9	15.5	27.1	21.6	23.1	20.7	25.7	29.2	31.3	24.9	25.5	21.4	-	
C6	400811	445217	19.1	28.2	20.7	18.5	18.7	13.1	16.1	12.8	20.0	19.9	14.1	17.0	18.2	15.3	-	
C7	397795	451308	15.7	20.9	14.0	11.6	12.2	8.8	10.7	10.7	13.1	18.7	18.4	15.2	14.1	11.9	-	
C8	398898	451835	16.9	21.8	17.1	13.8	14.8	12.5	12.8	14.0	13.2	18.7	23.1	17.5	16.3	13.7	-	
C9	400006	444760	20.8	24.8	19.2	18.5	18.6	16.7	15.8	15.2	20.6	20.9	24.6	20.3	19.7	16.5	-	
C10	393272	454225	22.7	28.8	21.4	21.5	21.0	22.6	22.5	20.6	17.8	23.4	27.9	8.3	21.5	18.1	-	
C11	385397	456675	18.8	21.3	15.0	14.3	14.6	15.3	15.1	13.4	13.5	17.6	22.3	17.9	16.6	13.9	-	
C12	401212	445224	16.0	20.3	16.3	13.2	13.2	9.2	11.2	11.1	14.6		21.4	13.6	14.5	12.2	-	
SC1	503929	488389	22.6	33.6	29.7	24.7	25.1		27.1	25.9	24.0	33.8	23.7	21.4	26.5	22.3		
SC2	504094	487815	19.1	26.3	25.0	24.2	26.0	22.8	25.1	22.1	26.9	27.1	28.5	19.4	24.4	20.5		
SC3	504109	487497	20.0	27.2	25.6	25.3	26.6	24.3	27.0	24.5	25.4	26.8	28.3		25.5	21.4		
SC4	505466	483378	13.4	16.7	13.1	11.2	11.4	10.7	11.0	10.7	11.8	17.1	16.7		13.1	11.0		
SC5	498998	484889	21.9	29.2	25.0	25.0	24.3	22.0	21.5	21.1		26.9	26.4	23.2	24.2	20.3		
SC6	499023	484885	20.0	23.8	16.2	16.9	17.2	17.2	16.9	20.0	14.3	23.1	23.6		19.0	16.0		
SC7	492186	482266	23.6	32.3	25.9	23.0	24.6	24.5	23.5	25.1	21.5	27.9	28.2	25.6	25.5	21.4		
SC8	492161	482291	16.6	21.3	16.8	15.2		14.2	15.2			18.5	18.7	16.6	17.0	14.3		
SC9	503288	487538	23.4	35.8	31.5	24.2	32.5	30.2	34.0	25.3	35.3	35.6	28.0	25.7	30.1	25.3		
SC10	503273	487523		27.2	24.7	21.9	22.8	19.0	24.3		23.5	24.6	23.8	21.1	23.3	19.6		
SC12	503218	487940	25.7	27.0	24.0	21.2	21.9	18.0	19.6	17.3	26.9	22.7	27.7		22.9	19.2		
SC13	503088	487922	21.0	31.5	27.4	20.3	24.5	22.0	24.2	19.0	22.4	28.8	23.0	23.3	23.9	20.1		
SC14	503045	488003	27.8	38.2	30.7	27.7	29.6	29.2	30.6	28.2	30.0	37.0	36.6	30.6	31.4	26.3		

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.84) Gradko	Annual Mean: Distance Corrected to Nearest Exposure	Comment
SC15	502929	488227	17.2	22.7	20.4	15.3	16.3	13.7	9.4	10.9	15.6	20.1	21.2	17.6	16.7	14.0		
SC16	488913	509314	10.8	13.6	18.3	10.3	10.5	9.5	10.9	9.3	13.6	13.7	11.4	9.6	11.8	9.9		
SC17	488912	509271	16.2	24.3	11.8	15.7	17.0	16.6	16.4	18.4	17.0	23.5	20.6	17.6	17.9	15.0		
SC18	489863	510887	14.4	17.3	15.4	12.6	16.8	11.9	16.3	16.5	16.3	19.0	16.0	13.5	15.5	13.0		
SC19	489388	510619	22.9	37.3	32.4			24.7	26.6	30.9	16.9	34.6			28.3	24.4		
SC20	489277	510331	13.2	17.4	15.3	13.2	13.8	13.8	13.0	14.7	14.6	17.7	15.5	14.6	14.7	12.4		
SC21	490370	509314	18.0	23.6	23.3	19.9	24.0		37.2	17.8	21.4		22.1	17.4	22.5	18.9		
SC22	503741	488079	14.3	15.9		10.9	11.3	8.7	10.7	9.0	14.2		15.9	14.4	12.5	10.5		
SC24	503615	489367	8.9	13.3	10.6	6.6	7.5	6.4	7.5	7.3	7.1	14.7	13.3	11.1	9.5	8.0		
SC25	509679	477308	14.2	16.8	13.3	10.8	10.6	10.1	10.4	11.0	10.6		16.1	13.9	12.5	10.5		
SC26	511698	480664	10.7	14.3	11.5	8.3	8.9	8.1	9.3	9.3	6.9	14.5	13.7	11.1	10.5	8.9		
SC27	504703	488799	15.4	24.6	18.6	16.4		18.4	22.7	17.9	13.9	23.8	22.0	18.1	19.2	16.2		
SC28	504357	488553	18.6	23.8	21.0	20.0	21.1	19.1	20.5	19.4	20.9	23.0	22.1	19.5	20.7	17.4		

- ☒ 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.
- ☒ North Yorkshire Council confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.

Notes:

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 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 North Yorkshire Council During 2024

NYC has not identified any new significant negative sources relating to air quality within the reporting year of 2024.

Additional Air Quality Works Undertaken by North Yorkshire Council During 2024

NYC has not undertaken any other works other than those reported in the 2024 year.

QA/QC of Diffusion Tube Monitoring

The nitrogen dioxide diffusion tubes across NYC are supplied and analysed by two separate laboratories:

- Socotec Didcot for the localities of Richmond, Hambleton, Ryedale, and Harrogate; the Socotec tubes are prepared with 50% triethanolamine (TEA) in acetone.
- Gradko for the localities of Selby, Craven and Scarborough; the Gradko tubes are prepared with 20% TEA in water.

All the monitoring has been completed in adherence with the 2024 Diffusion Tube Monitoring Calendar. The consolidation of diffusion tubes suppliers and methodology took place at the end of 2024 monitoring year, which allows a smoother transition to one supplier and further consistency across the next monitoring year.

The samples have been analysed in accordance with Socotec's standard operating procedure ANU/SOP/1015. This method meets the guidelines set out in Defra's 'Diffusion Tubes for Ambient NO₂ Monitoring: Practical Guidance'. This analysis of diffusion tube samples to determine the amount of nitrogen dioxide present on tubes is within the scope of the Socotec UKAS schedule.

Gradko follow the procedures set out in the document Diffusion Tubes for Ambient NO₂ Monitoring: Practical Guidance.

Socotec and Gradko have both taken part in the Air NO₂ Proficiency Testing Scheme. There were four results for 2024, for all periods both laboratories had 100% satisfactory results.

The results of precision testing show that Socotec had 30 Good and 3 Poor precision results for 2024, and Gradko had 26 Good and 0 Poor precision results for 2024. Tube precision is separated into two categories, “Good” or “Poor;” tubes are considered to have good precision where the coefficient of variation of duplicate or triplicate diffusion tubes for eight or more periods during the year is less than 20% and the average CV of all monitoring periods is less than 10%.

Diffusion Tube Annualisation

Annualisation has been carried out for nine sites, with data capture ranging from 4 to 8 months. The Diffusion Tube Data Processing Tool has been used to carry out the annualisation for 2024. Data from Automatic monitoring sites at York Bootham and York Fishergate have been used.

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

Site ID	Annualisation Factor -York Fishergate	Annualisation Factor - York Bootham	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean
HDC3	1.0731	1.0586	1.0659	8.2	8.8
HDC70	0.8867	0.8986	0.8926	36.8	32.8
H26	1.0629	1.0895	1.0762	32.6	35.1
H63	1.0407	0.9917	1.0162	22.4	22.8
H70	0.9900	1.0043	0.9972	22.1	22.0
H71	1.0484	1.0633	1.0559	8.7	9.2
S10	0.9618	0.9476	0.9547	26.8	25.6
S33	0.9549	0.9141	0.9345	16.4	15.3
SC19	1.0324	1.0161	1.0243	28.3	29.0

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2025 ASR have been corrected for bias using an adjustment factor. Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LAQM.TG22 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor

based on the comparison of diffusion tube results with data taken from NO_x/NO₂ continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

The localities of Richmond, Hambleton, Ryedale, and Harrogate use Socotec Didcot laboratory and have applied a national bias adjustment factor of 0.78 to the 2024 monitoring data, taken from the 04/25 version of the spreadsheet, which was comprised of 33 studies.

The localities of Selby, Craven and Scarborough use Gradko laboratory and have applied a national bias adjustment factor of 0.84 to the 2024 monitoring data, this was taken from the 04/25 version of the spreadsheet, which was comprised of 27 studies. NYC does not undertake automatic monitoring and therefore has not conducted a triplicate co-location study to allow for determination of a local bias factor. A summary of bias adjustment factors used over the past five years is presented in Table C.2 and C.3.

Table C.2 – Bias Adjustment Factor Socotec

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.78
2023	National	03/24	0.77
2022	National	03/23	0.76
2021	National	03/22	0.78
2020	National	03/21	0.77

Table C.3 – Bias Adjustment Factor Gradko

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.84
2023	National	03/24	0.81
2022	National	03/23 & 09/23	0.83 & 0.85
2021	National	03/22	0.84
2020	National	03/21	0.81

Table C.4 Bias Adjustment Factor Calculation – version 04/25

Socotec – 50% TEA in Acetone – Overall factor used 0.78.

National Diffusion Tube Bias Adjustment Factor Spreadsheet						Spreadsheet Version Number: 04/25				
Follow the steps below <u>in the correct order</u> to show the results of <u>relevant</u> co-location studies						This spreadsheet will be updated at the end of June 2025 LAQM Helpdesk Website				
Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods										
Whenever presenting adjusted data, you should state the adjustment factor used and the version of the spreadsheet										
This spreadsheet will be updated every few months: the factors may therefore be subject to change. This should not discourage their immediate use.										
The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory.						Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.				
Step 1:		Step 2:	Step 3:	Step 4:						
Select the Laboratory that Analyses Your Tubes from the Drop-Down List		Select a Preparation Method from the Drop-Down List	Select a Year from the Drop-Down List	Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor ² shown in blue at the foot of the final column.						
If a laboratory is not shown, we have no data for this laboratory.		If a preparation method is not shown, we have no data for this method at this laboratory.	If a year is not shown, we have no data ²	If you have your own co-location study then see footnote ¹ . If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953						
Analysed By ¹	Method To update your selection, choose (All) from the pop-up list	Year To update your selection, choose (All)	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m ³)	Automatic Monitor Mean Conc. (Cm) (µg/m ³)	Bias (B)	Tube Precision ¹	Bias Adjustment Factor (A) (Cm/Dm)
SOCOTEC Didcot	50% TEA in acetone	2024	R	City Of York Council	11	26	20	31.0%	G	0.76
SOCOTEC Didcot	50% TEA in acetone	2024	R	East Suffolk Council	9	26	20	32.8%	G	0.75
SOCOTEC Didcot	50% TEA in acetone	2024	KS	Marplebone Road Intercomparison	10	47	36	30.5%	G	0.77
SOCOTEC Didcot	50% TEA in acetone	2024	UB	Hull City Council	10	21	16	25.4%	P	0.80
SOCOTEC Didcot	50% TEA in acetone	2024	R	Hull City Council	9	27	20	35.3%	G	0.74
SOCOTEC Didcot	50% TEA in acetone	2024	R	Waverley Borough Council	10	21	18	13.7%	G	0.88
SOCOTEC Didcot	50% TEA in acetone	2024	R	Waverley Borough Council	11	22	16	32.3%	G	0.76
SOCOTEC Didcot	50% TEA in acetone	2024	R	Wrexham County Borough Council	10	15	13	17.0%	G	0.85
SOCOTEC Didcot	50% TEA in acetone	2024	UB	Gravesham Borough Council	11	21	19	9.7%	P	0.91
SOCOTEC Didcot	50% TEA in acetone	2024	R	Slough Borough Council	11	35	24	43.5%	G	0.70
SOCOTEC Didcot	50% TEA in acetone	2024	R	Slough Borough Council	11	26	20	32.6%	G	0.75
SOCOTEC Didcot	50% TEA in acetone	2024	R	Slough Borough Council	11	23	17	34.0%	G	0.75
SOCOTEC Didcot	50% TEA in acetone	2024	R	Slough Borough Council	10	31	23	33.4%	G	0.75
SOCOTEC Didcot	50% TEA in acetone	2024	R	Slough Borough Council	11	30	23	33.7%	G	0.75
SOCOTEC Didcot	50% TEA in acetone	2024	R	Thanet District Council	10	19	15	24.3%	G	0.80
SOCOTEC Didcot	50% TEA in acetone	2024	UB	Wirral Council	9	14	12	19.9%	G	0.83
SOCOTEC Didcot	50% TEA in acetone	2024	R	Derry City And Strabane District Council	11	28	32	-11.8%	G	1.13
SOCOTEC Didcot	50% TEA in acetone	2024	UB	Derry City And Strabane District Council	11	11	7	58.1%	G	0.63
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Horsham District Council	11	22	17	31.1%	G	0.76
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Leeds City Council	10	36	28	32.5%	G	0.75
SOCOTEC Didcot	50% TEA in Acetone	2024	KS	Leeds City Council	11	29	20	42.7%	G	0.70
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Leeds City Council	11	24	18	36.4%	G	0.73
SOCOTEC Didcot	50% TEA in Acetone	2024	UC	Leeds City Council	10	25	19	31.2%	G	0.76
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Huntingdonshire District Council	10	28	23	21.1%	G	0.83
SOCOTEC Didcot	50% TEA in Acetone	2024	R	North East Lincolnshire Council	11	39	21	84.1%	G	0.54
SOCOTEC Didcot	50% TEA in Acetone	2024	UB	North East Lincolnshire Council	10	12	10	20.0%	G	0.83
SOCOTEC Didcot	50% TEA in Acetone	2024	R	North East Lincolnshire Council	11	21	18	15.7%	G	0.86
SOCOTEC Didcot	50% TEA in acetone	2024	Overall Factor ² (33 studies)					Use	0.78	

Table C.5 Bias Adjustment Factor Calculation – version 04/25

Gradko – 20% TEA in Water – Overall factor used 0.84.

National Diffusion Tube Bias Adjustment Factor Spreadsheet					Spreadsheet Version Number: 04/25						
Follow the steps below in the correct order to show the results of relevant co-location studies										This spreadsheet will be updated at the end of June 2025 LAQM Helpdesk Website	
Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods											
Whenever presenting adjusted data, you should state the adjustment factor used and the version of the spreadsheet This spreadsheet will be updated every few months: the factors may therefore be subject to change. This should not discourage their immediate use.											
The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory.					Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.						
Step 1:		Step 2:		Step 3:		Step 4:					
Select the Laboratory that Analyses Your Tubes from the Drop-Down List		Select a Preparation Method from the Drop-Down List		Select a Year from the Drop-Down List		Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor ² shown in blue at the foot of the final column.					
If a laboratory is not shown, we have no data for this laboratory.		If a preparation method is not shown, we have no data for this method at this laboratory.		If a year is not shown, we have no data ²		If you have your own co-location study then see footnote ¹ . If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953					
Analysed By ¹	Method To update your selection, choose (All) from the pop-up list	Year To update your selection, choose (All)	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m ³)	Automatic Monitor Mean Conc. (Cm) (µg/m ³)	Bias (B)	Tube Precision ¹	Bias Adjustment Factor (A) (Cm/Dm)	
Gradko	20% TEA in water	2024	UV	Belfast City Council	10	24	20	19.9%	G	0.83	
Gradko	20% TEA in water	2024	R	Belfast City Council	12	43	34	28.8%	G	0.78	
Gradko	20% TEA in water	2024	R	Belfast City Council	12	24	21	13.9%	G	0.88	
Gradko	20% TEA in water	2024	R	Belfast City Council	12	34	27	25.5%	G	0.80	
Gradko	20% TEA in water	2024	R	Blackburn With Darwen Bo	12	22	17	32.9%	G	0.75	
Gradko	20% TEA in water	2024	R	Bath & North East Somerset	12	25	20	22.6%	G	0.82	
Gradko	20% TEA in water	2024	R	Cambridge City Council	12	19	15	28.5%	G	0.78	
Gradko	20% TEA in water	2024	UB	Plymouth City Council	12	16	14	13.8%	G	0.88	
Gradko	20% TEA in water	2024	R	Plymouth City Council	12	31	23	33.4%	S	0.75	
Gradko	20% TEA in water	2024	R	Monmouthshire County Council	12	29	24	19.4%	G	0.84	
Gradko	20% TEA in water	2024	KS	Marplebone Road Intercomparison	11	41	36	16.1%	G	0.86	
Gradko	20% TEA in water	2024	R	Lisburn & Castlereagh City Council	12	24	19	27.8%	G	0.78	
Gradko	20% TEA in water	2024	R	Ards And North Down Borough Council	11	28	20	44.5%	G	0.69	
Gradko	20% TEA in water	2024	R	Eastleigh Borough Council	12	29	24	20.3%	G	0.83	
Gradko	20% TEA in water	2024	UB	Eastleigh Borough Council	12	19	17	12.4%	G	0.89	
Gradko	20% TEA in water	2024	R	Eastleigh Borough Council	12	19	17	12.0%	G	0.89	
Gradko	20% TEA in water	2024	R	Gateshead Council	12	20	18	13.9%	G	0.88	
Gradko	20% TEA in water	2024	R	Gateshead Council	11	20	17	19.7%	G	0.84	
Gradko	20% TEA in water	2024	R	Gateshead Council	12	24	20	21.7%	G	0.82	
Gradko	20% TEA in water	2024	R	Gateshead Council	12	27	23	19.0%	G	0.84	
Gradko	20% TEA in water	2024	R	Gateshead Council	12	28	30	-6.0%	G	1.06	
Gradko	20% TEA in water	2024	R	Brighton & Hove City Council	11	34	27	26.3%	G	0.79	
Gradko	20% TEA in water	2024	R	Liverpool City Council	12	34	25	35.7%	G	0.74	
Gradko	20% TEA in water	2024	KS	Liverpool City Council	10	52	47	10.2%	G	0.91	
Gradko	20% TEA in water	2024	R	Nottingham City Council	10	29	26	12.2%	G	0.89	
Gradko	20% TEA in water	2024	R	Wycharon District Council	10	29	26	14.7%	G	0.87	
Gradko	20% TEA in water	2024	R	Worcestershire	12	12	12	-3.4%	G	1.04	
Gradko	20% TEA in water	2024	Overall Factor ² (27 studies)					Use	0.84		

NO₂ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO₂ concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO₂ fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO₂ concentrations corrected for distance are presented in Table B.1. No diffusion tube NO₂ monitoring locations within North Yorkshire Council required distance correction during 2024.

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

Figure D.1 – Link to all Maps of Non-Automatic Monitoring Sites and AQMAs

[Interactive Map of Non-Automatic Monitoring Sites and AQMA's](#)

Figure D.2 Map of AQMA 6 - Selby

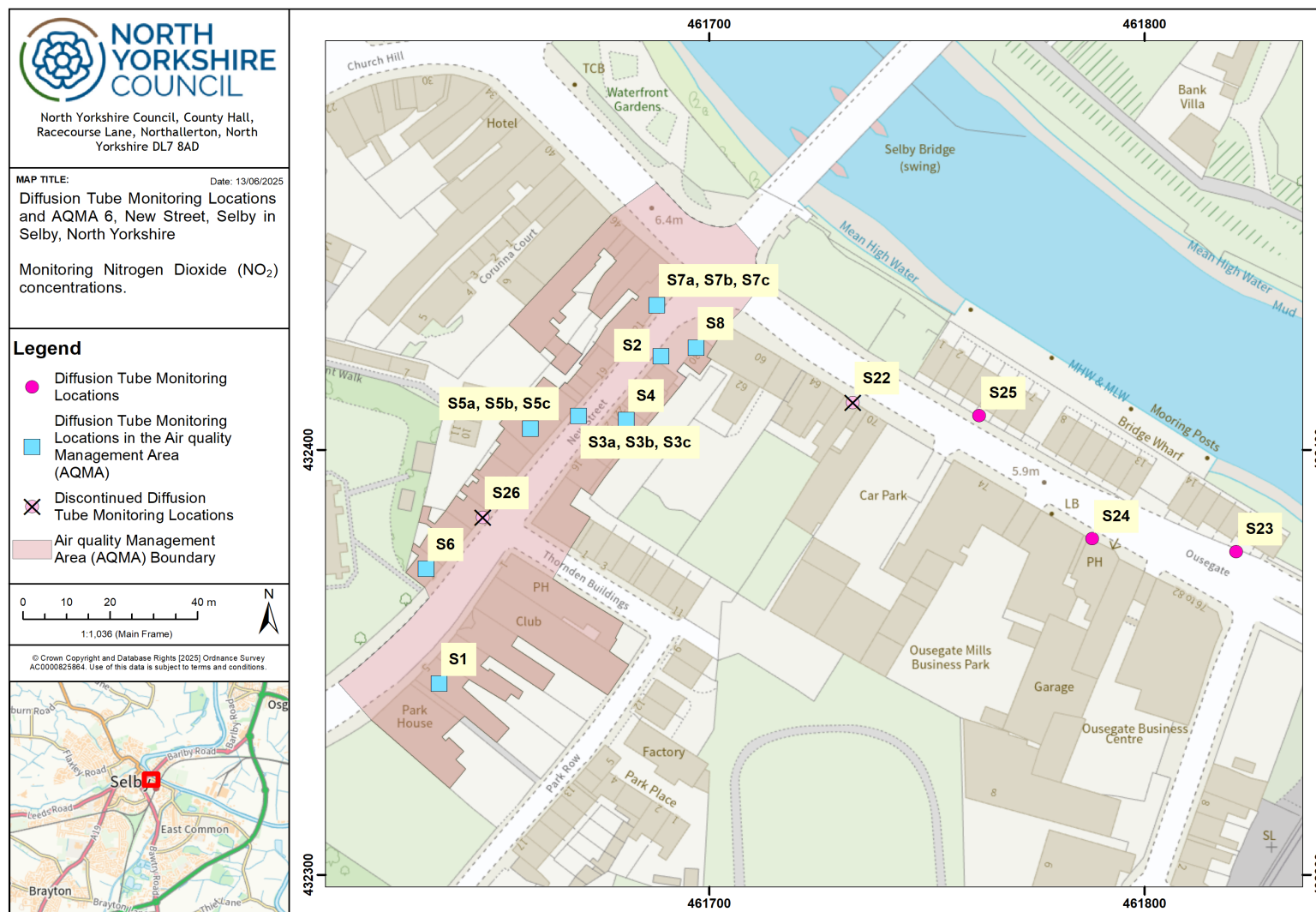


Figure D.3 Map of AQMA 2 - Wetherby Road, Harrogate

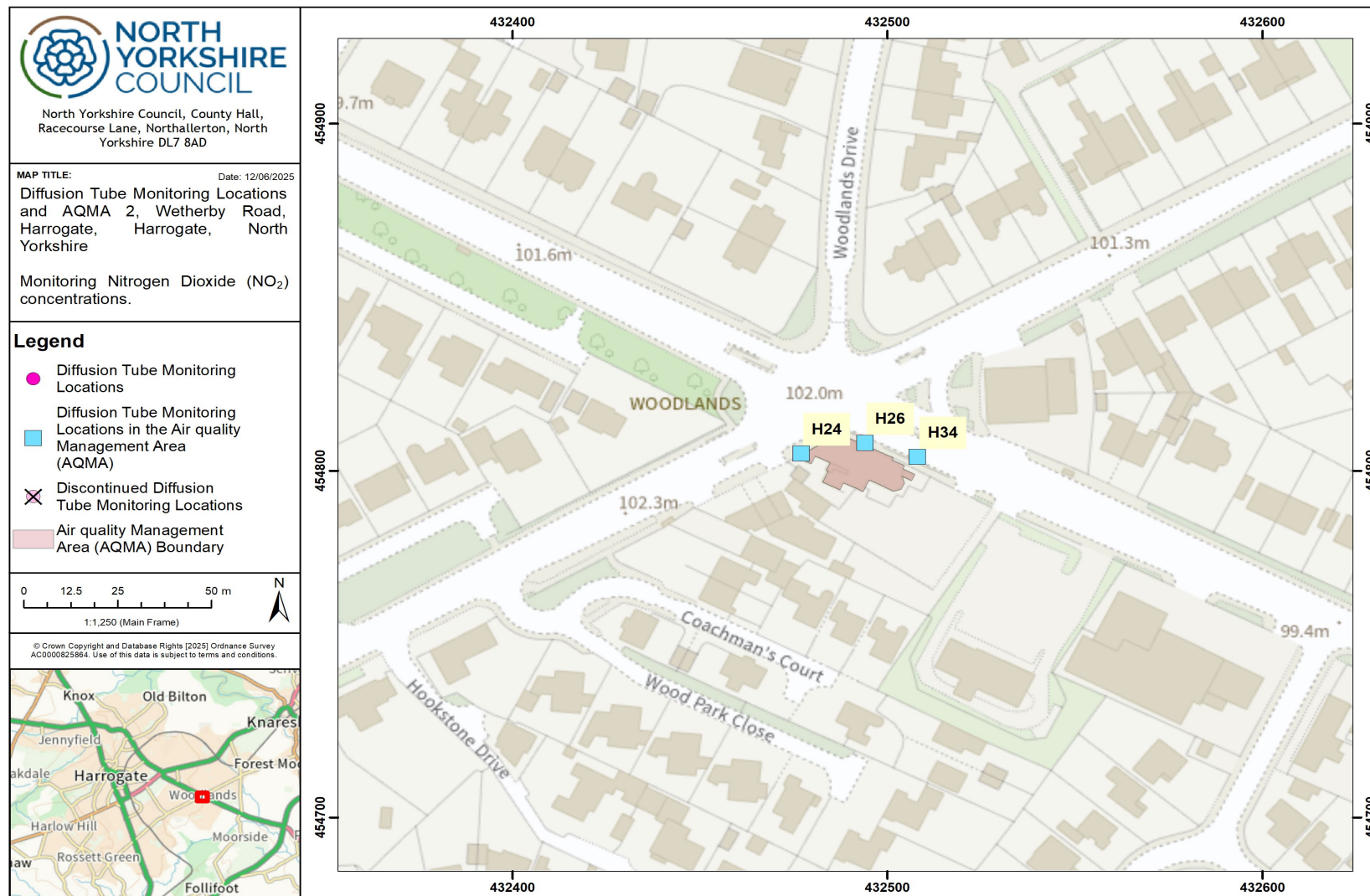


Figure D.4 Map of AQMA 1 – Bond End Knaresborough

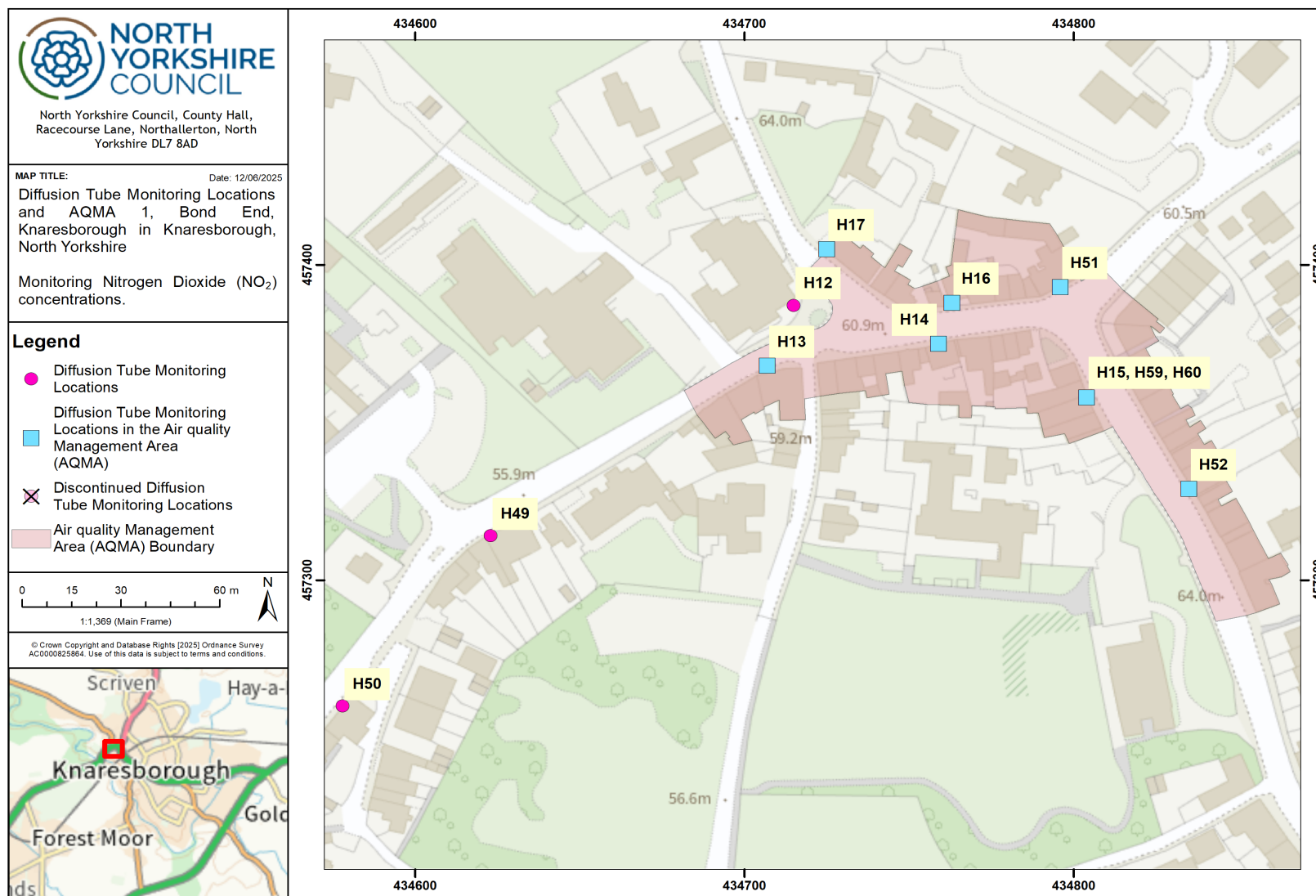
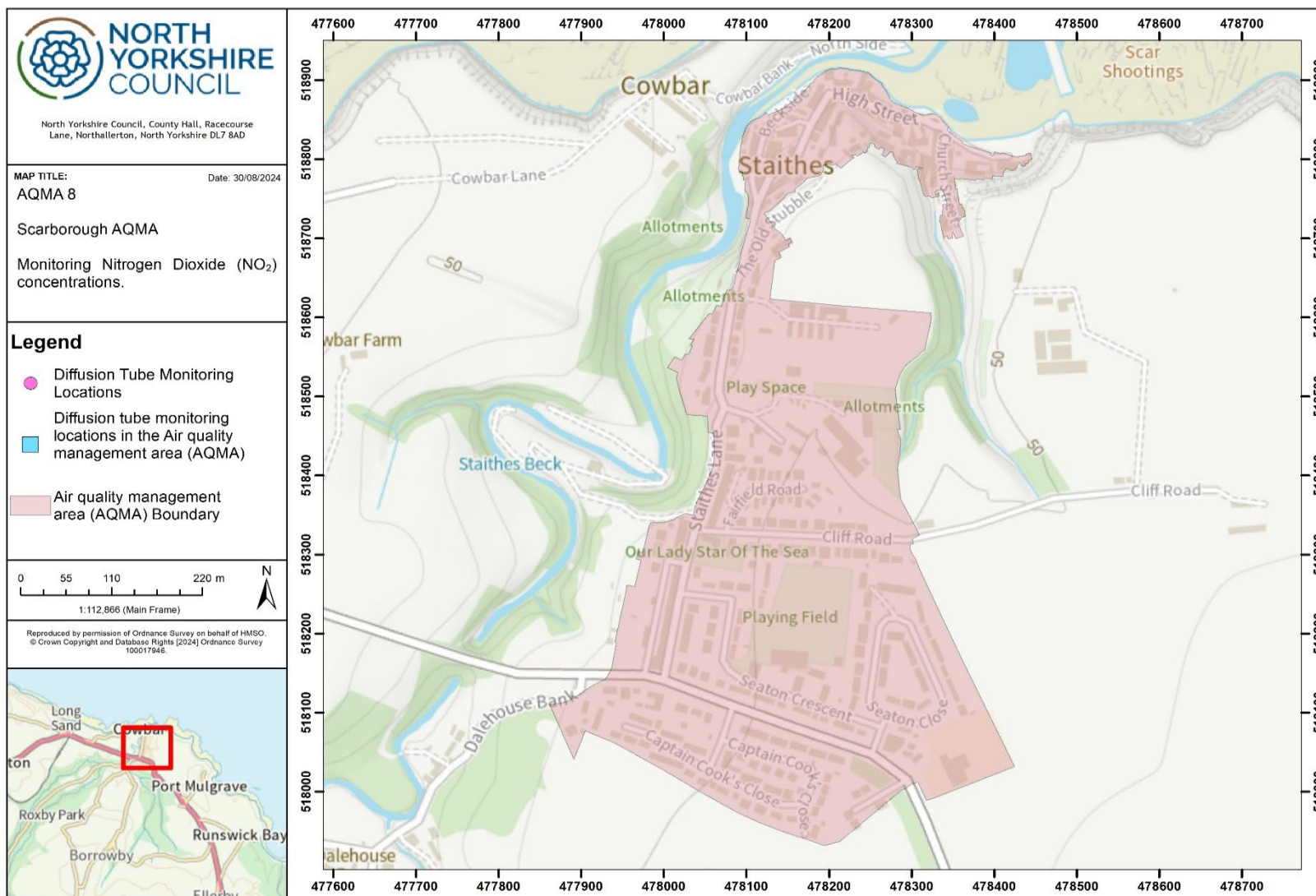


Figure D.5 Map of AQMA – The Village of Staithes Monitoring PM₁₀

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England⁷

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

⁷ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Glossary of Terms

Abbreviation	Description
AQM	Air Quality Management
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
AQO	Air Quality Objective
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
EU	European Union
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
NYC	North Yorkshire Council
NYMNP	North Yorks Moors National Park
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
TEA	Triethanolamine
TCF	Transforming Cities Fund
TSP	Total Suspended Particles
WYCA	West Yorkshire Combined Authority
YDNP	Yorkshire Dales National Park
WHO	World Health Organisation

References

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