North East Lincolnshire Council

2025 Annual Status Report

June 2025

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2025 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management, as amended by the Environment Act 2021

Date: June, 2025

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Local Responsibilities and Commitment

This ASR was prepared by the Bureau Veritas on behalf of the Environmental Protection Department of North East Lincolnshire Council with the support and agreement of the following officers and departments:

- Louisa Hewett, Environmental Protection Officer
- Adrian Moody, Licensing & Environmental Protection Manager
- Highway and Transport Department
- Communication and Marketing Team
- Policy Strategy and Resources
- Economy and Growth Team
- Fleet Management
- Planning Department
- Public Health Department
- Regulatory Services Strategic Lead
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Executive Summary: Air Quality in Our Area

Air Quality in North East Lincolnshire

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

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

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

Table ES 1 - Description of Key Pollutants

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

North East Lincolnshire is situated on the east coast of England, at the mouth of the River Humber. It covers 192 km^2, is home to approximately 160,000 people and incorporates the towns of Grimsby, Immingham and Cleethorpes. The main source of air pollution within North East Lincolnshire is from road traffic, with additional background sources including domestic, industrial and commercial space heating.

During 2024 there was an overall decrease in the annual mean NO_2 concentrations recorded at diffusion tube sites and all automatic monitoring stations when compared to 2023. Two sites show slight increases in concentrations in 2024, two sites (NEL S3 and NEL S16) in Grimsby, however these concentrations are well below the annual mean NO_2 mean objective (40µg/m^3). Overall, all measured concentrations continued to be below the annual air quality objectives. The maximum NO_2 annual mean concentration was recorded at the Cleethorpe Road diffusion tube site co-located with the automatic monitor (NEL 24/25/26) at 30.5µg/m^3. At the three automatic monitoring stations, annual mean NO_2 concentrations of 9.6µg/m^3 (Immingham Woodlands Avenue AURN), 22.3µg/m^3 (Cleethorpes Road) and 18.6µg/m NO_2 (Peaks Parkway) were recorded in 2024. During 2024, the annual mean and hourly objective for NO_2 was not exceeded at any site.

On 22nd May 2024 the Air Quality Management Area (AQMA) declared in North East Lincolnshire Council, located at Cleethorpes Road in Grimsby ('Grimsby AQMA') was formally revoked. The AQMA was declared in 2010 due to exceedances of the NO_2 annual mean. An Air Quality Action Plan was produced initially in 2012. This was revised in July 2020 and North East Lincolnshire Council adopted the Air Quality Action Plan, outlining new measures to reduce NO_2 concentrations in the AQMA.

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.

North East Lincolnshire Council is committed to reducing the exposure of people to poor air quality in order to improve health. The actions taken by North East Lincolnshire Council to improve air quality can be considered under five broad topics:

- Transport: Upgrading existing transport infrastructure, changing the road layout to give priority to public transport, forming traffic plans that encourage the use of greener modes of transport, and reducing congestion and associated vehicle emissions.
- Public Education: Encouraging wider behavioural changes in the local population with respect to travel choices and raising to the public on the impacts of air pollution. This is done by educating people so that they feel inclined to change their current habits.

- Planning and Infrastructure: Mitigating potential air quality impacts effectively by being involved in decision making early on for future developments required to support the growth of North East Lincolnshire.
- Strategies and Policy Guidance: Working with partners and stakeholders to direct the use of legislation and targeted enforcement to control air pollution.
- Air Quality Monitoring: Ensure satisfactory air quality monitoring data is available to track outcomes of the implemented Air Quality Action Plan measures.

Consultation on a new North East Lincolnshire Council Local Plan is currently underway and supporting the drive towards a low carbon economy and supporting a greener and more biodiversity rich environment are two key themes that will be given increased weight in the draft local plan.

Conclusions and Priorities

During 2024, no exceedances of the NO_2 annual mean objective were identified within the existing AQMA, continuing the trend observed since 2018 which supported the move to revoke the AQMA in 2024. Additionally, the NO_2 annual mean air quality objective was not exceeded at any monitoring location outside of the AQMA during 2024. Relative to 2023, the NO_2 annual mean concentration also decreased at all three automatic monitoring sites within North East Lincolnshire in 2024. This overall decrease in NO_2 across both the diffusion tube network and automatic monitoring network continues the post covid trend in concentrations.

The Air Quality Strategy[2] updated in 2024 to following the revocation of the Grimsby AQMA in 2024, outlines the priorities of North East Lincolnshire Council in addressing air quality. These seven priorities align to the categories listed above and are as follows:

- **Priority 1**: Improve transport infrastructure to encourage the use of public transport, or sustainable modes of travel (i.e. walking/cycling).
- **Priority 2**: Promote behavioural changes by raising awareness and educating the public on the impacts of air pollution so that they rethink their travel choices.
- **Priority 3**: Ensure that potential air quality impacts are mitigated early on in any new developments, required to support the growth of North East Lincolnshire.
- **Priority 4**: Use legislation and enforcement to control air pollution by effectively engaging with partners and stakeholders.

- **Priority 5**: Obtain measures of air quality and ensure the data is satisfactory so that it can be determined if the measures that have been implemented from the Air Quality Action Plan are having a positive impact on the concentration of NO_2.
- **Priority 6**: Raise public awareness by encouraging the local community to become involved in improving air quality and take actions to reduce their contributions to local air quality emissions.
- **Priority 7:** Funding air quality improvements, a long-term commitment to fund air quality improvements within the borough.

North East Lincolnshire Council currently engage with the following working groups on the topic of air quality:

- North East Lincolnshire Council Air Quality Steering Committee (AQSC) – an internal Air Quality Steering Group which continues to meet quarterly to discuss council wide air quality issues
- Associated British Ports (ABP) – quarterly meetings with ABP and other Humber local authorities discussing Port and local air quality issues
- Yorkshire and Lincolnshire Pollution Advisory Group (YALPAG) – a knowledge sharing working group with other local authorities
- Air Quality Hub – North East Lincolnshire Council has completed the onboarding process on the Air Quality Hub.
- Bus Quality Partnership – quarterly

Whilst the Grimsby AQMA was revoked on 22nd May 2024, North East Lincolnshire Council remain committed to improving air quality within the local area. North East Lincolnshire has revised the monitoring locations within the area and added a further two diffusion tube locations in 2024.

How to get Involved

Air pollution is contributed to, often inadvertently, by the wider community. Therefore, localised changes in behaviour can help to reduce the concentrations of air pollutants on a wider scale. Many of these measures will also simultaneously improve health:

- Where possible, consider walking, cycling or using public transport. This is important for short journeys where it may not be necessary to use a private vehicle. An increase in the amount of people using active forms of travel of public transport

not only reduces the emissions by decreasing the number of cars on the road, but also from the reduced congestion, thus less stopping and starting of vehicles.

- Driving economically by turning your engine off when stationary. Not idling the vehicle can reduce emissions but also save fuel.
- Keep your vehicle in good working order. Having well inflated tyres means your car will be more efficient and use less fuel.

North East Lincolnshire Council have also promoted initiatives such as ‘Clean Air Day’, encouraging people to find out more about air pollution, share information with others and help make the environment safer for everyone. Clean Air Day took place on 20th June 2024 and North East Lincolnshire Council promoted the day on social media channels.

Additional air quality resources can be found on North East Lincolnshire Council’s website.

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1 Local Air Quality Management

This report provides an overview of air quality in North East Lincolnshire 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 North East Lincolnshire Council to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England are presented in Table E.1.

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority should prepare an Air Quality Action Plan (AQAP) within 18 months. The AQAP should specify how air quality targets will be achieved and maintained and provide dates by which measures will be carried out.

As of 22nd May 2024, North East Lincolnshire Council does not have any declared AQMAs. The Air Quality Action Plan from 2020 is still in place to prevent and reduce polluting activities and the AQMA was still declared for the start of 2024 which this ASR is reporting. The Air Quality Action Plan is available here.

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
Grimsby AQMA	September 2010 Revoked 22nd May 2024	NO_2 Annual Mean	Cleethorpe Road between Freeman Street and Nacton Street	No	48.4µg/m^3	30.5µg/m^3	7	July 2020 AQAP 2024 AQS	July 2020 AQAP 2024 AQS

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

☒ **North East Lincolnshire Council confirm that all current AQAPs have been submitted to Defra.**

2.2 Progress and Impact of Measures to address Air Quality in North East Lincolnshire

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

1. It is commended that the Council could formally revoke the AQMA in May 2024 due to consistently good air quality. It is noted that the Council are currently preparing the Air Quality Strategy and are planning on reporting on it in next year's ASR. The Council can use work from their AQAP to inform their AQS.

NELC has updated their Air Quality Strategy (AQS) to reflect the revocation of the AQMA.

2. The text in chapter 1 refers to the wrong year. This should be amended before publishing the ASR.

This has been amended in this years ASR.

3. It should be noted that there is a difference between monitoring sites/locations and number of diffusion tubes. The text in chapter 3.1.2 reports that the Council have 35 diffusion tube sites, however, the Council have 29 diffusion tube monitoring sites/locations while having 35 diffusion tubes deployed. This should be corrected before publishing the ASR so that the text is consistent with the tables.

There were 35 tubes and 29 sites as this includes three triplicate sites in 2023. This year there are three triplicate sites and a further 31 single tube sites totalling 37 diffusion tubes across 31 sites.

4. It is recommended to include a brief summary of the monitored $PM_{2.5}$ concentrations and the Public Health Outcomes Framework D01 indicator "Fraction of mortality attributable to particulate air pollution" in chapter 2.3 in future ASRs.

This has been included in the 2025 ASR.

5. It is recommended to include a summary of the PM_{10} and $PM_{2.5}$ monitoring results and trends in chapter 3.2.2. and 3.2.3 in future ASRs.

This has been included in the 2025 ASR.

6. It is recommended to include trend figures for the automatic monitoring sites for NO_2, PM_{10} and $PM_{2.5}$ results to highlight trends in future ASRs.

This has been included in the 2025 ASR.

7. It is commended that the Council regularly review their diffusion tube monitoring network to add and remove monitoring locations as appropriate.

This has been reviewed further in 2024 and a further two monitoring locations added.

8. It is commended that the trend graphs provided a very legible and include a line for the relevant AQO.

The graphs have been continued in this report and updated for 2024.

9. The Council have provided good mapping of all monitoring locations within the district.

The graphs have been continued in this report and updated for 2024.

Levelling Up Project

North East Lincolnshire Council was awarded £18.4m from the Government's Levelling Up Fund for the rejuvenation of Pier Gardens and Market Place following the development of the 2022 Cleethorpes Masterplan, which was spearheaded by Hemingway Design. Pier Gardens and Market Place are set to be rejuvenated, supported by the Government's Levelling Up Fund.

The proposed development aims to re-think the relationship between traffic and pedestrians, enhancing the public realm by creating a safer, more vibrant and sustainable environment for local people, businesses and visitors.

Revitalizing the town is a pressing priority. It is essential to transform the Market Place into a focal point with more space for people and more reasons to linger. This change is expected to bring both economic and social advantages.

As part of the monitoring return for the fund NELC need to indicate how the reduce in carbon emissions would be measured. NELC therefore installed additional diffusion tube monitoring on Market Street in 2024 to monitor the changes in concentrations of NO_2 before and after the project is completed.

Net Zero Carbon Roadmap

In October 2019, North East Lincolnshire Council declared a climate emergency and in 2016 the council signed up to Climate Local. Since then, North East Lincolnshire Council has worked with partner EQUANS to plan how to reduce the carbon emissions. The Net

Zero Carbon Roadmap explains how targets will be achieved and mitigate the impact of climate change. North East Lincolnshire Council adopted the roadmap and set net zero targets in December 2021.

The Net Zero Carbon Roadmap sets out six workstreams which must be completed to reach net zero by 2030:

- Low carbon estate (our buildings)
- Low carbon fleet (council vehicles)
- Low carbon street lighting
- Climate-conscious decision-making
- Climate-conscious purchasing (goods and services)
- Climate conscious behaviours (staff and those who work for the council)

The Net Zero Carbon Roadmap also sets out a further six workstreams the council will follow, to help the area of North East Lincolnshire reach carbon net zero by 2050:

- Climate-conscious community: by facilitating and encouraging community engagement and sustainability actions
- Low carbon commercial buildings: working as an enabler to ensure sufficient support is in place for businesses to increase sustainability
- Low carbon transport: through policy change, network investment and partnership working we want to enable a local transition to more sustainable travel
- Low carbon industry: by supporting our partners and industry in achieving industrial decarbonisation, including carbon capture and hydrogen economy
- Enable low carbon new homes-through our role as a policy maker and planning authority
- Climate-conscious improvements to older homes, by supporting our partners and residents to improve their homes to become more sustainable

The measures to improve air quality that feature in North East Lincolnshire Council's Natural Assets Plan 2021 can be found here.

The 'Improving Air Quality' section outlines the actions that North East Lincolnshire Council want to see with respect to air quality, these include:

- Air quality issues being prominent in decision making and being considered in local policy development
- Air quality monitoring identifying risks and delivering publicly available information

- Solutions for air quality reduction, including those that use natural assets

The Natural Asset Plan also outlines North East Lincolnshire Council's main focus areas for the coming years that will help to reduce air pollution within the area. These cover a range of topics and include the following:

- Acquire new monitoring equipment to assist when meeting new statutory duties on measuring concentrations of smaller particulates (i.e. $PM_{2.5}$)
- Producing a Planning Technical Advice Document for air quality
- Linking air quality into public education/public health on environmental matters
- Providing accessible air quality information to assist those with breathing difficulties
- Make links between air quality and other environmental services
- Investigate how nature-based solutions might help to improve air quality

Quarterly monitoring of progress on both of these documents is undertaken with an annual report produced and submitted to cabinet. Our Second Annual Report to Cabinet has been completed with members happy with our progress to meet our Net Zero targets. We have also been successful over the past year in bids for the UTCF and LATF tree planting funds as well as the Salix PSDS 3c fund. This means that over 800 standard trees and 3000 whips will be planted across the borough. On top of this 9 council buildings will be decarbonised over the next 2 years. We are exploring more grant funding and other ways to deliver our Natural Assets Plan and Carbon Roadmap, with great progress having been made so far.

Local Transport Plan

The current Local Transport Plan (LTP) has been reviewed, the refresh is due for publication in conjunction with the Local Plan over the next 12-18 months. The key themes are focused on de-carbonisation of transport with a big focus on electric vehicles and the infrastructure required to support the Government targets over the next few years of eliminating petrol and diesel cars, HGV's and buses which are one of the main factors that increase air pollution.

Offering sustainable and green alternatives to car travel are another major focus and North East Lincolnshire Council will be looking at offering better improved services along with educating and encouraging change in people's choices to show improved healthier lifestyles that emerge from cycling and walking which ultimately help improve the air quality.

2.2.1 Air Quality Action Plan

North East Lincolnshire Council has taken forward a number of direct measures during the current reporting year of 2024 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2. Thirty-five measures are included within Table 2.2, with the type of measure and the progress North East Lincolnshire Council have made during the reporting year of 2024 presented. Nine of these measures were new in 2024 to continue the work North East Lincolnshire Council has made with two completed measures to date. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2.

More detail on these measures can be found in the 2020 Air Quality Action Plan[1].

Key completed measures in 2024 include the revocation of the AQMA and the publication of the NELC Air Quality Strategy[2].

The Traffic Signal Priority Programme is expected to be completed by 30 May 2025, which will improve bus routes, reduce congestion and reduce journey times.

New for 2025 include nine measures of which two have been completed already. These measures focus on promoting active travel particularly cycling and measure 34 is expected to be completed in 2025. The new measures also include promoting low emission vehicles and increasing public awareness of Clean Air Day through a poster competition. One of the measures already completed in 2025 includes measure 39, two NELC officers have undertaken pollution protection and control training to help with the review of environmental permits and reduce emissions from part A2 and B permitted activities.

Through the AQAP North East Lincolnshire Council has achieved compliance with the annual NO_2 air quality objective within the Grimsby AQMA which was revoked on 22nd May 2024

Following the revocation of the AQMA, NELC produced an AQS to continue the work undertaken in recent years to improve air quality. The AQS has seven main topics where the Council is focused on reducing air pollution in the borough.

[1] https://www.nelincs.gov.uk/assets/uploads/2021/01/Air-Quality-Action-Plan-2020.pdf

[2] North East Lincolnshire Council, 2024, North East Lincolnshire Council Air Quality Strategy 2021 - 2026

These include:

1. Transport: Working towards a cleaner, less polluting transport network that both supports sustainable transport modes (walking, cycling, car share and public transport) and makes maximum use of existing resources through effective highways and transport planning.
2. Public Education: Encouragement of wider behavioural changes in local population with respect to their travel choices, raise awareness and educate members of the public on the health impact of air pollution.
3. Planning and Infrastructure: Be involved in the planning decision making process as early as is practicable to mitigate potential air quality impacts and support environmentally sustainable development in NEL.
4. Strategies and Policy Guidance: Working with other departments and stakeholders to direct the use of legislation and targeted enforcement to control air pollution.
5. Air Quality Monitoring: The collation of air quality monitoring data will identify pollution hotspots enabling interventions and improvement to be made in those areas of concern.
6. Raise Public Awareness: NELC will encourage the local community to become involved in improving air quality and take actions to reduce their contributions to local air quality emissions.
7. Funding Air Quality Improvements: To give long term commitment to fund air quality improvements within the borough.

Table 2.2 details the measures NELC are working on through these themes.

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
10	Ensure that air quality is considered in the planning process	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2015	On-going	NELC	NELC	Not Funded	< £10k	Implementation	Ensure developments do not have a negative impact on AQ	Number of planning applications with AQ conditions/ assessments	Environmental Protection Team review planning applications weekly for adverse effects of AQ	Good support and understanding on AQ matters from the planning department
32	EV Infrastructure Project. Following the adoption of the EV Strategy by NELC in March 2024, we are now working towards installing 800 EV charge points in the Borough by 2030	Promoting Low Emission Transport	Other	2023	2030	NELC & EQUANS	LEVI Grant Fund, ORCS Fund, NELC, Equans & Private Investment	NELC have been given an indicative award	£1m - £10m	Planning	Reduced vehicle emissions	No. of Council EV charge points operational throughout the Borough	Transport Team are currently working through the ORCS bid and LEVI bid in order to secure the contracts and execute projects. There are also LTP funds available from NELC to assist areas in the project which are not eligible for ORCS and LEVI.	The Councillors and Government are committed to the role out of the EV infrastructure. However, supply issues and lack of public support could pose threat to the projects being delayed.
42	Active Travel Revenue Grant, this fund facilitates capacity building and behavioural change towards to increase the activity of walkers, wheelers and cyclists	Promoting Travel Alternatives	Intensive Active Travel campaign and infrastructure	2024	2025	NELC & EQUANS	Active Travel Funding	Funded	£100k	Implementation	Reduced vehicle emissions	% modal shift to car share/public transport/ walking/ cycling	The funding acceptance letter has been returned to Active Travel England, a programme of activities has been produced to be completed over the coming months, this will include LCWIP refresh, feasibility design on active travel projects, a new Active Travel Officer role, delivering bike mechanic training and faculties, mobile Dr Bike sessions and exploring School Streets opportunities	Active Travel England support the role out of this project, political support is required to ensure the project outcome is delivered
17	Declared Climate Emergency in September 2019	Policy Guidance and Development Control	Other policy	2019	2030	NELC & EQUAN	NELC & EQUAN	Partially Funded	> £10m	Planning and Implementation	Carbon reduction	NELC Carbon Neutral by 2030 and NEL Carbon Neutral by 2050	NELC adopted the Carbon Roadmap and Natural Assets Plan in 2021 and the quarterly monitoring of progress on both of these, with an annual report to cabinet. Our third Annual Report to Cabinet is currently set to be presented to Cabinet members. The report has been presented at scrutiny with members happy with our progress to meet our Net Zero targets. Since implementation, NELC has planted at least 700 trees and has begun decarbonising its buildings through the Salix Decarbonisation Grant.	Measure progressing
8	Public Air Quality Information	Public Information	Via the Internet	2017	On-going	NELC	NELC	Not Funded	£10k - 50k	Implementation	Reduced vehicle emissions	Number of people reached	Continue to promote AQ issues through social media channels. AQ Webpages have been updated to provide more information on AQ matters. Air Quality - NELC | NELC	Funding required for any further work.
29	BSIP + Funding - £1 fare scheme (£1 per bus trip after 6pm week days and £1 per trip all day weekends)	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	2024	2025	NELC/ Stagecoach East Midlands	DfT BSIP funding	Funded	£500k - £1m	Implementation	Improved infrastructure/ improved facilities for passengers, increased patronage/ modal shift	Increase in patronage and potential encouragement of modal shift.	Delivering	Due to the Government increasing the national fare cap from £2 to £3, the Council has been required to change the scheme from £1 all day evening and weekends to £1.50 after 6pm (7 days per week).

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
31	Revision of the Air Quality Strategy	Policy Guidance and development control	Air Quality Planning & Policy Guidance	2024	2025	NELC	NELC	Not Funded	< £10k	Completed	Public information	Not quantifiable	Air Quality Strategy revised to consider the AQMA revocation	Complete
11	Collaborate with developers to improve sustainable transport links serving new developments	Transport Planning and Infrastructure	Other	2015	On-going	NELC & Developer	NELC & Developer	Not Funded	>£10k	Implementation	Ensure developments do not have a negative impact on AQ	% modal shift to public transport	Continuing working on this issue with the requirements for Travel Plans in major planning apps which are assessed by Highways colleagues	
1	Improve public transport services, bus stop/train infrastructure & information and interchange facilities	Transport Planning and Infrastructure	Public transport improvements-interchanges stations and services	2016	On-going	NELC & Service Provider	NELC & Service Provider	Not Funded	£50k - £100k	Implementation	Reduced vehicle emissions	Increase in use of public transport based on average numbers of people using the services	The 24/25 Local Transport Plan Capital Programme & Bus Service Improvement Plan includes bus stop infrastructure and public transport information improvements. The programme will be delivered by 31 March 2025.	Currently being delivered
9	Completion and submunition of yearly Annual Status Report. The report to me be made available on the Website. Air Quality update included in the Corporate Annual Report.	Public Information	Via the Internet	2000	Yearly	NELC	NELC	Not Funded	< £10k	Implementation	Public information	Availability of recently published reports online	2024 Annual Status Report/Action Plan 2020 is available on NELC website. Air Quality - NELC | NELC	Implementation on-going
14	NELC Vehicle Procurement	Promoting Low Emission Transport	Company Vehicle Procurement - Prioritising uptake of low emission vehicles	2016	On-going	NELC	NELC	Capital	£1 million - £35 million	Implementation	Reduced vehicle emissions	Number of vehicles replaced (in addition to normal fleet turnover)	Currently replaced thirty-six diesel vehicles with thirty-six full electric vehicles, including the mayor's car (20% of fleet). Currently trying to plan how to replace larger commercial vehicles, which are either limited on availability or are not an economically viable option. EV Budget has been approved up to 2027/28. This includes the replacement of another ten vehicles to electric	Lack of alternatives and cost are limiting transition.
15	Produce Air Quality Strategies setting out their plans to reduce emissions across the port estate including ship and shore activities.	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2019	On-going	NELC & ABP	ABP	NO		Planning and Implementation	Reduce port emissions	Not quantifiable	ABP has released a sustainability strategy which espouses an all-embracing holistic approach to creating a positive impact upon the environment we operate in. Promoting sustainable ports is a key element of the strategy, with overarching ambitions to improve our performance in the following topic areas: Net Zero, Air Quality, Biodiversity, Waste and Water. https://www.abports.co.uk/media/fo2ii2cv/abp-ready-for-tomorrow.pdf	

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
16	Local air quality monitoring across the Borough to ensure a high standard of data is achieved	Public Information	Other	2000	On-going	NELC	NELC	Not Funded	£10k - 50k	Implementation	LAQM	Number of monitoring locations	Continue to monitor NO_2 levels in the borough, currently have two real-time monitors and thirty-five diffusion tubes, also have access to Immingham AURN data	
20	Indoor Air Quality	Public Information	Via the Internet	2023	n/a	NELC	NELC	Not Funded	<£10K	Implementation	Public information	Public information	Added Indoor Air Pollution onto Departmental Service Plan. Information added to NELC website. Discussions with Public Health Dept around how we can promote further information on the subject.	
21	Produce Developers Guidance	Policy Guidance and Development Control	Other policy	2023	2024	NELC	NELC	Not Funded	< £10k	Planning	Ensure that AQ is a material consideration in the planning process	Number of requests from developers for AQ information	Meeting with the planning department to discuss implementation of measure	Currently signpost developers to the Land-Use Planning and Development Control document produced by EPUK and AQM for advice on undertaking AQA
24	Bus Priority Measures	Transport Planning and Infrastructure	Bus route improvements	2023	2025	NELC/ Stagecoach East Midlands	DfT BSIP funding	Currently being funded through the BSIP	£500k - £1m	Implementation	Reduction in congestion. Reduction in bus idle time/ journey time improvements	Increase in public transport use and reduction is bus punctuality/ journey time	Available scheme options considered by the Enhanced Bus Quality Partnership. A small section of schemes have already been delivered such as double yellow line schemes which aim to keep the highway clear for local bus services. The main highway schemes will commence by the end of September 2025	
25	Traffic Signal Priority Programme	Transport Planning and Infrastructure	Bus route improvements	2023	2025	NELC	DfT BSIP funding	No	£100k - £500k	Implementation	Reduction in journey times, resulting in increased patronage. Less congestion/ emissions	Increase in public transport use and reduction is bus punctuality/ journey time	Funds available from April 2023, scheme to be delivered by 30 May 2025	
13	Consideration of measures to improve air quality in all new strategies when a Strategy is reviewed or updated	Policy Guidance and development control	Other policy	2017	On-going	NELC & EQUAN	NELC & EQUAN	Not Funded	< £10k	Implementation	LAQM	Air Quality a key topic in released strategy documents	Air Quality Steering Group continues to meet quarterly to discuss AQ issues council wide. Increasing our efforts to consider a range of environmental issues when decisions are made and business cases developed.	Implementation on-going
27	Bus Service Enhancements	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	2023	2026	NELC/ Stagecoach East Midlands	DfT BSIP funding	Currently being funded through the BSIP	£500k - £1m	Planning	Improved connections resulting in increased patronage/ modal shift	Increase in patronage and potential encouragement of modal shift.	Service Enhancements currently being delivered with BSIP Phase 1 funding for this measure due to end 31 March 2026.	
28	High Quality Bus Interchange	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	2024	2025	NELC/ Stagecoach East Midlands	DfT BSIP funding	Will be partly funded by the BSIP	£1m - £10m	Planning	Improved infrastructure/ improved facilities for passengers, increased patronage/ modal shift	Increase in patronage and potential encouragement of modal shift.	Scheme due to commence during 2024/2025 and delivery to continue into 2025/2026.	

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
30	BSIP Phase 3 funding - Funding to improve frequency of local bus services, pre 09:30am Concessionary Travel and Bradley Road bus service.	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	2024	2025	NELC/ Stagecoach East Midlands	DfT BSIP funding	Currently being funded through the BSIP	£500k - £1m	Subject to DfT approval	Improved infrastructure/ improved facilities for passengers, increased patronage/ modal shift	Increase in patronage and potential encouragement of modal shift.	Pre 9:30am Concessionary Travel commenced from 3 June 2024 and the BSIP Phase 3 service improvements commenced from 21 July 2024.	
3	Bus fleet upgrades	Promoting low emission transport	Public vehicle procurement – prioritising uptake of low emission vehicles	2017	On-going	NELC & Stagecoach	NELC & Stagecoach	Not Funded	£1 million - £10 million	Aborted	Reduced vehicle emissions	Number of low/zero emission buses	NELC considered whether to submit an Expression of Interest to the Department for Transport Zero Emission Bus Regional Areas scheme – 2021/22	The Council could not provide any match funding towards it was decided to not submit a bid.
12	Collaborate with developers to promote the inclusion of electric charging points for electric/hybrid vehicles at new development sites	Promoting Low Emission Transport	Producing alternative refuelling infrastructure to promote low emissions vehicles, EV recharging, gas fuel recharging	2016	On-going	NELC & EQUAN	NELC &EQUAN	Not Funded	< £10k	Implementation	Ensure developments do not have a negative impact on AQ	Number of planning applications where charging points have been secured	Signposting developers to Building Control Document S as a minimum to ensure EV charging is installed	Implementation on-going
33	To provide workshop container and supplies for cycle repair/recycle in conjunction with R-Evolution to provide facilitates to train bike mechanics, helping to supply recycled bikes in deprived areas.	Promoting Travel Alternatives	Promotion of cycling	2023	2024	NELC & EQUAN	NELC & EQUAN	Funding awarded	£10k - £50k	Implementation	Reduced vehicle emissions	Uptake of cycles and number of trained bike mechanics to facilitate the project	The container and site were secured in late 2023, the project is hoping to be fully operational by summer of 2024	These projects need volunteers from the local community to work alongside R-Evolution in order to future proof the success.
26	Fare capping by day/ week	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	2023	2025	NELC/ Stagecoach East Midlands	DfT BSIP funding	Funded	£100k - £500k	Aborted	Encourage modal shift/ increase patronage, resulting in less single occupancy car journeys	Increase in patronage and potential encouragement of modal shift.	DfT have asked NELC to use this funding on an alternative BSIP scheme. The funding has been reallocated to the provision of high-quality bus infrastructure.	
41	NELC Air Quality Steering Committee	Policy Guidance and Development Control	Air Quality Planning & Policy Guidance	2018	On-going	NELC & EQUANS	NELC & EQUANS	Not funded	< £10k	Implementation	Not quantifiable		Air Quality Steering Group meets quarterly to discuss AQ issues council wide. Increasing our efforts to consider a range of environmental issues when decisions are made and business cases developed.	
New For 2025														
34	Active Travel Infrastructure, this project will be delivered this year to improve facilities for cyclists using Park Drive/Weelsby Rd crossing by introducing a cycle	Promoting Travel Alternatives	Promotion of cycling	2024	2025	NELC & EQUANS	Active Travel Funding, NELC & Equans	Funding awarded	£100k - £500k	Implementation	Reduced vehicle emissions	% modal shift to car share/public transport/ walking/ cycling	Feasibility and draft plans have been produced with a view to delivering the project in late summer 2025.	Active Travel England support the role out of this project, political support is required to ensure the project outcome is delivered

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
	lane and improving the approach to the crossing													
35	Active Travel Infrastructure this project will be delivered this year to improve facilities for walkers and wheelers. This project will upgrade the current facilities in the New Cartergate Triangle to improve footways, lighting and accessibility for a key connectivity point for the Grimsby Masterplan.	Promoting Travel Alternatives	Intensive Active Travel campaign and infrastructure	2024	2025	NELC & EQUANS	Active Travel Funding, NELC & Equans	Funding awarded	< £350k	Implementation	Reduced vehicle emissions	% modal shift to car share/public transport/ walking/ cycling	Feasibility and draft plans have been produced, public consultation finished in Feb 25, project currently out for tender with a view to delivering summer 2025.	Active Travel England support the role out of this project, political support is required to ensure the project outcome is delivered
36	Doughty Depot Rationalisation Scheme	Promoting Low Emission Transport	Other	2024	2026	NELC & EQUANS				Implementation	Reduced vehicle emissions	EV charging infrastructure is to be increased	Depot rationalisation will see both Doughty Road and Gilbey Road merged to one depot at Doughty Road. This will increase the concentration of vehicles into the one site. EV charging infrastructure is to be increased at Doughty Road to accommodate the transfer to electric vehicles.	
37	Revocation of Grimsby AQMA	Policy Guidance and Development Control	Air Quality Planning & Policy Guidance	2010	2024	NELC	NELC	Not Funded	£50k-£100k	Completed	10-15µg/m^3	Achievement of the NO2 AQ Objective within the AQMA	The AQMA was officially revoked on the 24th of May 2024	Completed, however monitoring will continue within this area
38	Clean Air Day Poster Competition/ Clean Air Day information distributed via social media	Public Information	Other policy	2024	2024	NELC	NELC	Not funded	< £10k	Aborted	Reduce emissions	Number of entries to completion	Project was aborted due to the General Elections	
39	NELC Environmental Protection Officers undertaking Pollution Protection and Control training	Environmental Permits	Other	2024	2025	NELC	NELC	Not funded	< £10k	Completed	Control of emissions from Part A2 and Part B permits	Reduce emissions	Training completed by two officers	Completed
40	ABP/Humber LA Group	Policy Guidance and Development Control	Other	2023	On-going	ABP/NELC/ NLC/HCC/ EROYC	n/a	n/a	< £10k	Implementation	Not quantifiable		Immingham ABP and Local Authority officers from the Humber region meet tri-annually to discuss port and regional issues and share experience and best practise	
42	Clean Air Night 2024	Public Information	Via the Internet	2024	2024	NELC	NELC	Not funded	< £10k	Completed	Not quantifiable	Reduction in $PM_{2.5}$	Comms sent out on the run up to Clean Air Night and on the day.	

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
43	Active Travel Revenue Grant, this fund facilitates capacity building and behavioural change towards to increase the activity of walkers, wheelers and cyclists	Promoting Travel Alternatives	Intensive Active Travel campaign and infrastructure	2024	2025	NELC & EQUANS	Active Travel Funding	Funding awarded	£100k	Implementation	Reduced vehicle emissions	% modal shift to car share/public transport/ walking/ cycling	The funding acceptance letter has been returned to Active Travel England, we have currently produced a programme of activities to be completed over the following months, this will include LCWIP refresh, feasibility design on active travel projects, a new Active Travel Officer role, delivering bike mechanic training and faculties, mobile Dr Bike sessions and exploring School Streets opportunities	Active Travel England support the role out of this project, political support is required to ensure the project outcome is delivered

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

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy[3], 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.

There are a number of measures outlined in Table 2.2 that have been implemented to reduce NO_2 emissions that will subsequently reduce $PM_{2.5}$ concentrations. Some major sources of $PM_{2.5}$ are road traffic from exhaust emissions, brake and tyre wear, and the resuspension of particles on the road. Thus, by reducing private vehicle use and introducing more efficient, less polluting vehicles, the concentration on $PM_{2.5}$ should begin to reduce.

The requirement for $PM_{2.5}$ monitoring has been highlighted in the North East Lincolnshire Council Natural Assets Plan. The Immingham AURN station began monitoring $PM_{2.5}$ in 2022.

The Public Health Outcomes Framework data tool[4] compiled by Public Heath England (PHE) quantifies the mortality burden of $PM_{2.5}$ within England on a county and local authority scale. The latest Public Health Outcomes Framework Indicator number D01 - Fraction of mortality attributable to particulate air pollution (New Method) for North East Lincolnshire was noted to be 5.5% in 2023 (the latest year of data availability), slightly increased from 5.3 in 2022 but consistent with 2021 levels of 5.5%. This is above the average mortality percentage in the Yorkshire and Humber region and also slightly above the average for England at 5.2% attributable to air pollution.

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

[4] PHE. Public Health Outcomes Framework. Available at: https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data

Background $PM_{2.5}$ monitoring within the area is however well below the annual average $PM_{2.5}$ air quality objectives. In 2024, the $PM_{2.5}$ concentration at Immingham Woodlands was 7µg/m^3. This is also below the UK target[5] for 2040 that $PM_{2.5}$ be less than 10µg/m^3.

[5] Environmental Targets (Fine Particulate Matter) (England) Regulations (2023) https://www.legislation.gov.uk/uksi/2023/96/contents/made

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 East Lincolnshire 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 East Lincolnshire Council undertook automatic (continuous) monitoring at two sites during 2024, in addition there is an Automatic Urban and Rual Network (AURN) monitoring site located within the authority boundary at Immingham. Table A.1 in Appendix A shows the details of the automatic monitoring sites.

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

3.1.2 Non-Automatic Monitoring Sites

North East Lincolnshire Council undertook non-automatic (i.e. passive) monitoring of NO_2 at 37 diffusion tubes sites during 2024 including three triplicate sites. This included two new monitoring locations in Cleethorpes around the Market Street area as part of works through the Levelling Up Fund. Table A.2 in Appendix A presents the details of the non-automatic sites.

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

3.2 Individual Pollutants

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

3.2.1 Nitrogen Dioxide (NO_2)

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

For diffusion tubes, the full 2024 dataset of monthly mean values is provided in Appendix B. Note that the concentration data presented in Table B.1 includes distance corrected values, only where relevant. December 2024 concentrations were considered to be lower than expected and therefore anomalous. In accordance with guidance from the LAQM helpdesk, these concentrations were removed from the dataset.

All monitoring locations were below the annual mean NO_2 air quality objective in 2024. The continued trend in decreasing concentration continues in North East Lincolnshire with lower concentrations at the majority of monitoring locations, passive and continuous in 2024. Slightly higher concentrations of NO_2 were measured at two diffusion tube locations (S3 and S16). The trends can be seen in the Figures A1 – Figure A4 in Appendix A which include the new monitoring locations for 2024.

The highest concentration was recorded at the co-located triplicate diffusion tubes at the Grimsby Automatic monitoring station within the now revoked AQMA. The annual concentration was 30.5µg/m^3 in 2024 which demonstrates the continued evidence for the revocation of the AQMA.

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

During 2024 there were no exceedances of the NO_2 hourly objective of 200µg/m^3, with the maximum hourly concentration recorded at the three automatic monitoring stations being 63.7µg/m^3 (AURN Immingham Woodlands Avenue), 113.4µg/m^3 (Cleethorpes Road) and 83.4µg/m^3 (Peaks Parkway). In addition, no single diffusion tube recorded an annual mean concentration greater than 60µg/m^3, indicating that it is unlikely that the 1-hour objective was exceeded at any diffusion tube monitoring site in 2024.

3.2.2 Particulate Matter (PM_{10})

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

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

Concentrations of PM_{10} have decreased in the three years since monitoring commenced in 2022. The annual mean concentration is well below the annual mean air quality objective of 40µg/m^3. There were no exceedances of the air quality objective of 50µg/m^3.

3.2.3 Particulate Matter ($PM_{2.5}$)

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

Concentrations of $PM_{2.5}$ have below the annual mean concentration target of 10µg/m^3 since monitoring began in 2022. Concentrations in 2024 remained constant compared to 2023 concentrations.

3.2.4 Sulphur Dioxide (SO_2)

North East Lincolnshire Council did not undertake SO_2 monitoring in 2024.

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Which AQMA? (1)	Monitoring Technique	Distance to Relevant Exposure (m) (2)	Distance to kerb of nearest road (m) (1)	Inlet Height (m)
AURN	Immingham Woodlands Avenue	Urban Background	518277	415116	NO_2, PM_{10}, $PM_{2.5}$	No	N/A	Chemiluminescent FIDAS	10.0	4.0	3.0
Cleethorpe Road	Cleethorpe Road	Roadside	527767	410414	NO_2	Yes	Grimsby AQMA (revoked May 2024)	Serinus 40 Oxides	0.0	2.0	2.0
Peaks Parkway	Peaks Parkway	Roadside	527540	408080	NO_2	No	N/A	Serinus 40 Oxides	20.0	1.5	2.0

Notes:

(1) N/A if not applicable

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

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

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
NEL S1	8 Town Hall Street, Grimsby	Roadside	527095	409367	NO_2	No	5.0	2.0	No	2.0
NEL S2	Littlefield Lane, Grimsby	Kerbside	526185	409136	NO_2	No	3.0	1.5	No	2.0
NEL S3	123 Chelmsford Avenue, Grimsby	Kerbside	525461	408347	NO_2	No	15.0	2.0	No	2.0
NEL S4	15 Scartho Road, Grimsby	Kerbside	526482	407708	NO_2	No	15.0	2.0	No	2.0
NEL S5	213 Scartho Road, Grimsby	Kerbside	526504	406678	NO_2	No	15.0	2.0	No	2.0
NEL S6	127 High Street, Waltham	Kerbside	526427	404055	NO_2	No	15.0	1.0	No	2.0
NEL S7	Toll Bar Roundabout, New Waltham	Roadside	527716	404516	NO_2	No	13.0	2.0	No	2.0
NEL S8	Toll Bar A16 side, New Waltham	Roadside	527748	404396	NO_2	No	31.0	2.0	No	2.0
NEL S9	28 St Peters Avenue, Cleethorpes	Kerbside	530760	408378	NO_2	No	0.0	1.5	No	2.0
NEL S10	Isscas Hill (Bursar St corner), Cleethorpes	Kerbside	530288	408898	NO_2	No	10.0	0.5	No	2.0
NEL S11	Hewitts Circus, Cleethopres	Roadside	529532	406835	NO_2	No	6.0	2.0	No	2.0
NEL S12	Love Lane Corner, Grimsby	Roadside	528891	408078	NO_2	No	14.0	2.0	No	2.0
NEL S13, NEL S14, NEL S15	Peaks Parkway Grimsby Air Quality Station C	Roadside	527540	408080	NO_2	No	20.0	2.0	Yes	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)
NEL S16	Aylesby Road, Grimsby	Roadside	523284	409883	NO_2	No	3.0	2.0	Yes	2.0
NEL S17	Pelham Road/Margaret Street , Immingham	Kerbside	518108	414533	NO_2	No	29.0	0.5	Yes	2.0
NEL S18, NEL S19, NEL S20	Woodlands, Immingham Air Quality Station C	Urban Background	518277	415116	NO_2	No	10.0	5.0	No	2.0
NEL S21	Kings Road/Pelham Road roundabout, Immingham	Roadside	519193	415279	NO_2	No	20.0	1.0	No	2.0
NEL S22	9 Pyewipe Road, Grimsby	Roadside	526077	410124	NO_2	No	2.0	2.0	Yes	1.5
NEL S23	Victoria Mills, Victoria Street North, Grimsby	Kerbside	527182	410092	NO_2	No	5.0	2.0	Yes	2.0
NEL S24, NEL S25, NEL S26	Cleethorpe Road, Grimsby Air Quality Station C	Roadside	527761	410425	NO_2	Yes - Grimsby AQMA	0.0	2.0	Yes	2.0
NEL S27	113 Cleethorpe Road, Grimsby	Kerbside	527754	410445	NO_2	Yes - Grimsby AQMA	5.0	0.5	No	2.0
NEL S28	123 Cleethorpe Road, Grimsby	Kerbside	527789	410438	NO_2	Yes - Grimsby AQMA	5.0	0.5	No	2.0
NEL S29	6 Freeman St, Riby Square, Grimsby	Kerbside	527693	410413	NO_2	No	0.0	1.5	No	2.0
NEL S30	458 Cleethorpe Road, Grimsby	Roadside	528725	410102	NO_2	No	7.0	3.0	Yes	2.0
NEL S31	3 Eleanor Street, Grimsby	Roadside	527627	409563	NO_2	No	6.0	2.0	Yes	2.0
NEL S32	Peaks Parkway & Welholme Road, Grimsby	Kerbside	527403	408666	NO_2	No	8.0	1.0	Yes	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)
NEL S33	Lamppost Magistrates Court, Grimsby	Kerbside	527183	409647	NO_2	No	3.0	2.0	No	2.0
NEL S34	Victoria Street South, Grimsby	Roadside	527181	409513	NO_2	No	0.0	2.0	No	2.0
NEL S35	Doughty Dept, Grimsby	Other	527288	409223	NO_2	No	n/a	0.5	No	2.0
NEL S36	Steels, Market Place Cleethorpes	Urban Centre	530576	408871	NO_2	No	15.0	1.0	No	2.0
NEL S37	Sainsburys, Market Place, Cleethorpes	Urban Centre	530488	408829	NO_2	No	10.0	2.0	No	2.0

Notes:

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

(2) N/A if not applicable.

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
AURN	518277	415116	Urban Background	99.0	99.0	11.0	12.1	11.7	10.4	9.6
Cleethorpe Road	527767	410414	Roadside	94.1	94.1	26.0	33.4	29.6	26.4	22.3
Peaks Parkway	527540	408080	Roadside	99.8	99.8	20.0	29.2	26.3	20.6	18.6

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

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

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

Notes:

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

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

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

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

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

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

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

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
NEL S1	527095	409367	Roadside	90.6	90.6	26.3	32.2	28.1	29.0	27.2
NEL S2	526185	409136	Kerbside	81.1	81.1	-	-	-	17.3	16.2
NEL S3	525461	408347	Kerbside	90.6	90.6	-	-	-	14.1	16.0
NEL S4	526482	407708	Kerbside	90.6	90.6	-	-	-	23.8	23.1
NEL S5	526504	406678	Kerbside	90.6	90.6	-	-	-	21.0	18.6
NEL S6	526427	404055	Kerbside	90.6	90.6	-	-	-	14.7	14.3
NEL S7	527716	404516	Roadside	90.6	90.6	20.6	21.6	19.8	16.8	16.4
NEL S8	527748	404396	Roadside	90.6	90.6	12.0	17.5	15.1	12.3	11.7
NEL S9	530760	408378	Kerbside	90.6	90.6	-	-	-	17.3	16.9
NEL S10	530288	408898	Kerbside	81.1	81.1	-	-	-	19.6	17.3
NEL S11	529532	406835	Roadside	56.6	56.6	19.1	23.2	21.0	16.8	14.4
NEL S12	528891	408078	Roadside	83.0	83.0	15.1	21.9	19.8	16.6	15.9
NEL S13, NEL S14, NEL S15	527540	408080	Roadside	83.0	83.0	20.0	23.6	21.9	18.6	16.3
NEL S16	523284	409883	Roadside	90.6	90.6	16.4	18.9	16.6	12.2	13.0
NEL S17	518108	414533	Kerbside	81.1	81.1	26.4	31.8	28.1	14.6	13.1

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
NEL S18, NEL S19, NEL S20	518277	415116	Urban Background	83.0	83.0	-	-	-	9.6	9.2
NEL S21	519193	415279	Roadside	75.0	75.0	21.1	25.3	21.7	19.4	18.1
NEL S22	526077	410124	Roadside	90.6	90.6	22.5	27.2	23.8	23.9	22.1
NEL S23	527182	410092	Kerbside	90.6	90.6	29.7	34.8	28.0	23.0	21.0
NEL S24, NEL S25, NEL S26	527761	410425	Roadside	90.6	90.6	32.7	39.1	36.7	33.0	30.5
NEL S27	527754	410445	Kerbside	90.6	90.6	28.2	34.2	31.5	25.4	24.7
NEL S28	527789	410438	Kerbside	90.6	90.6	28.0	35.8	31.3	23.9	23.1
NEL S29	527693	410413	Kerbside	90.6	90.6	28.4	31.8	27.2	24.3	21.8
NEL S30	528725	410102	Roadside	90.6	90.6	26.4	31.8	28.1	24.2	23.4
NEL S31	527627	409563	Roadside	83.0	83.0	-	-	-	18.6	17.4
NEL S32	527403	408666	Kerbside	90.6	90.6	23.6	28.2	25.9	20.9	20.5
NEL S33	527183	409647	Kerbside	83.0	83.0	20.6	25.6	23.9	20.3	20.7
NEL S34	527181	409513	Roadside	90.6	90.6	22.6	29.6	26.7	24.4	20.2
NEL S35	527288	409223	Other	90.6	90.6	-	-	-	11.6	13.3

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
NEL S36	530576	408871	Urban Centre	90.6	90.6	-	-	-	-	14.3
NEL S37	530488	408829	Urban Centre	90.6	90.6	-	-	-	-	16.2

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

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

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

Notes:

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

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

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

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

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

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

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

Figure A.1 – Trends in Annual Mean NO_2 Concentrations within Grimsby AQMA area (revoked May 2024)

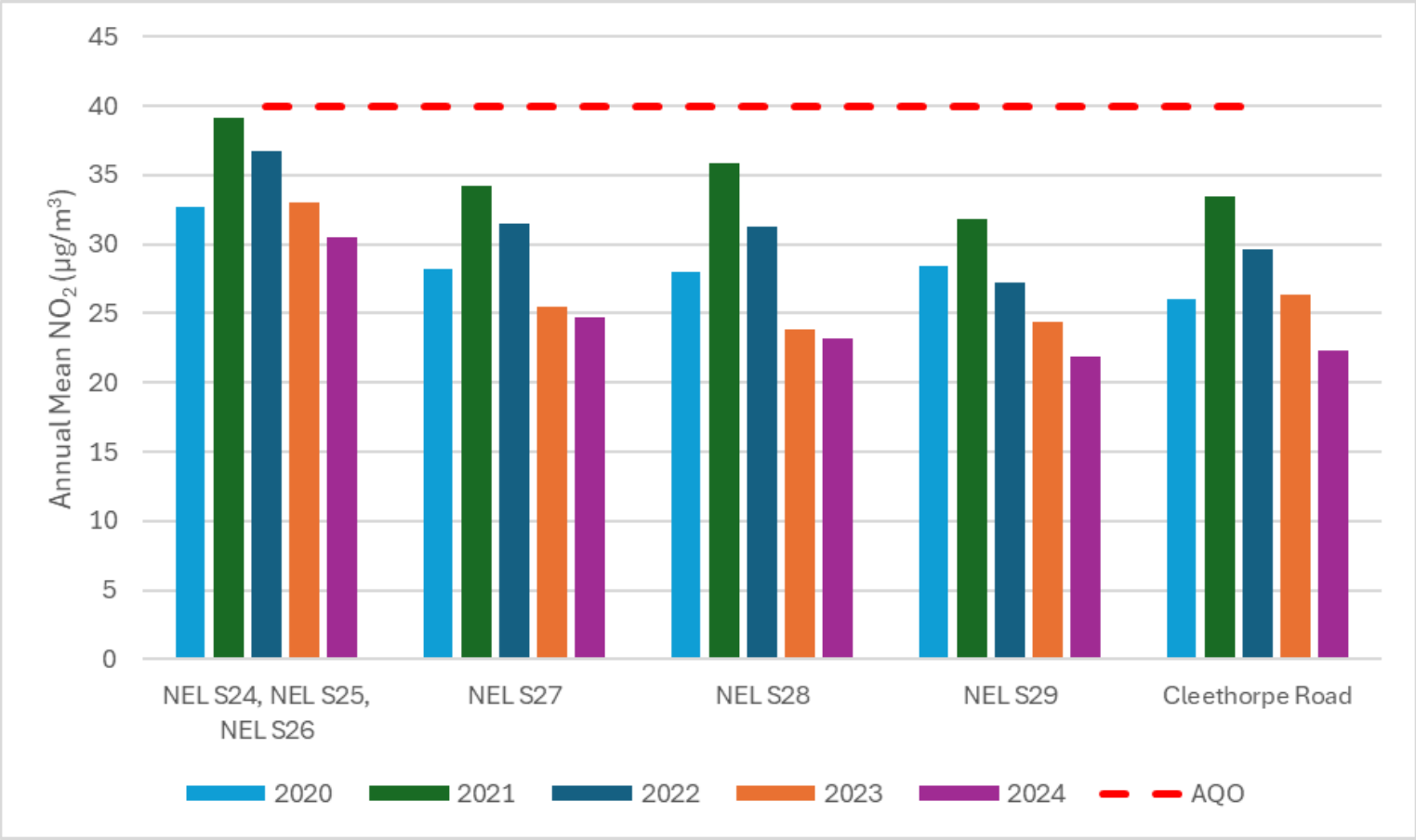
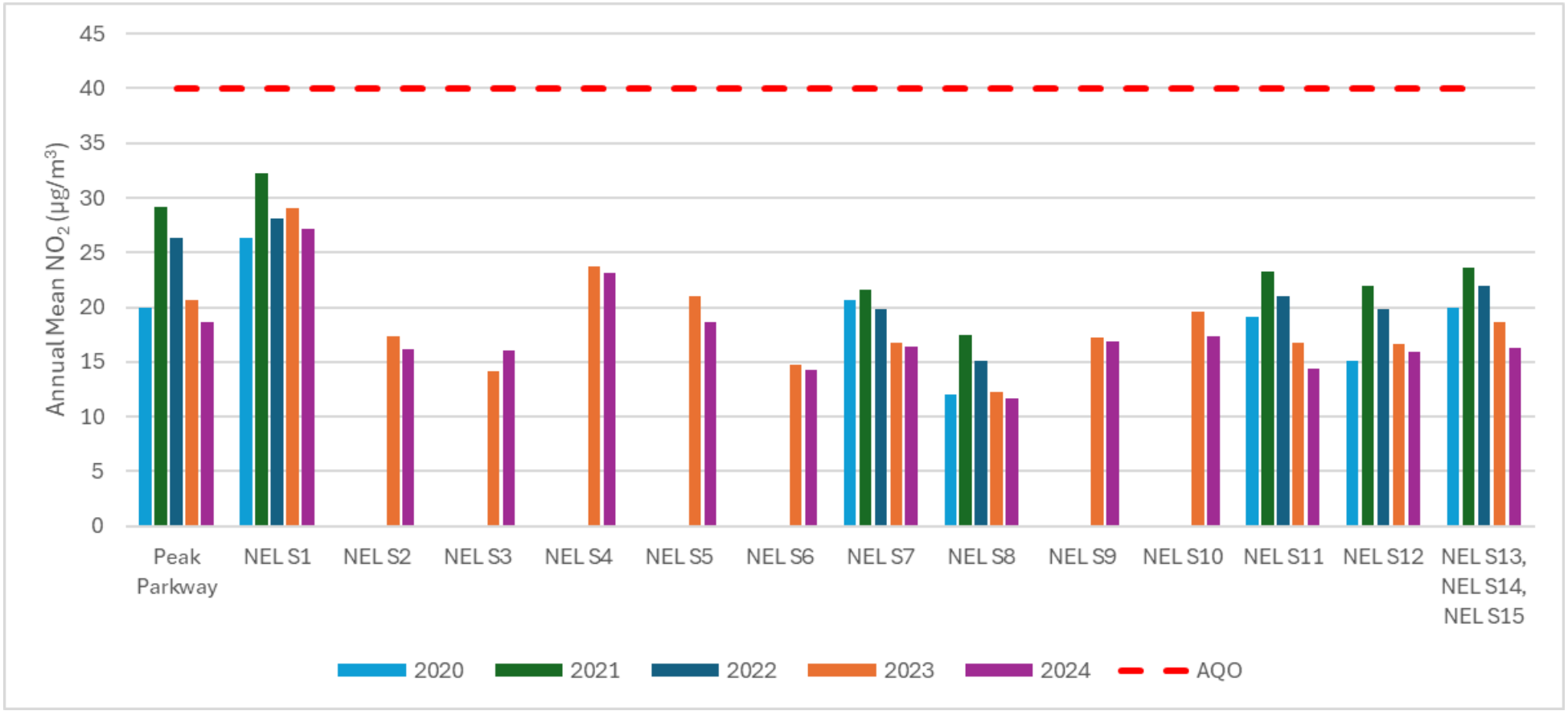
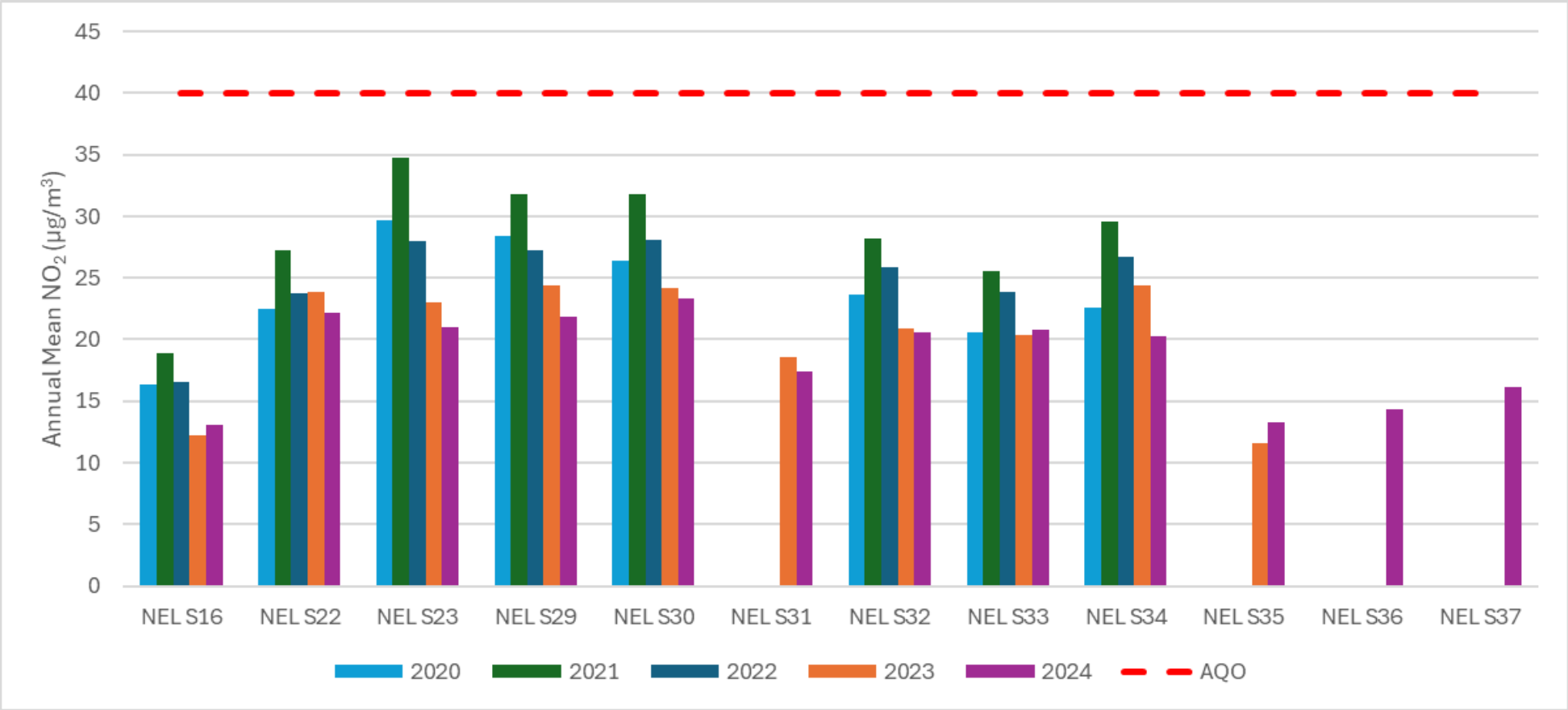


Figure A.2 – Trends in Annual Mean NO_2 Concentrations within Grimsby (not within AQMA part 1)



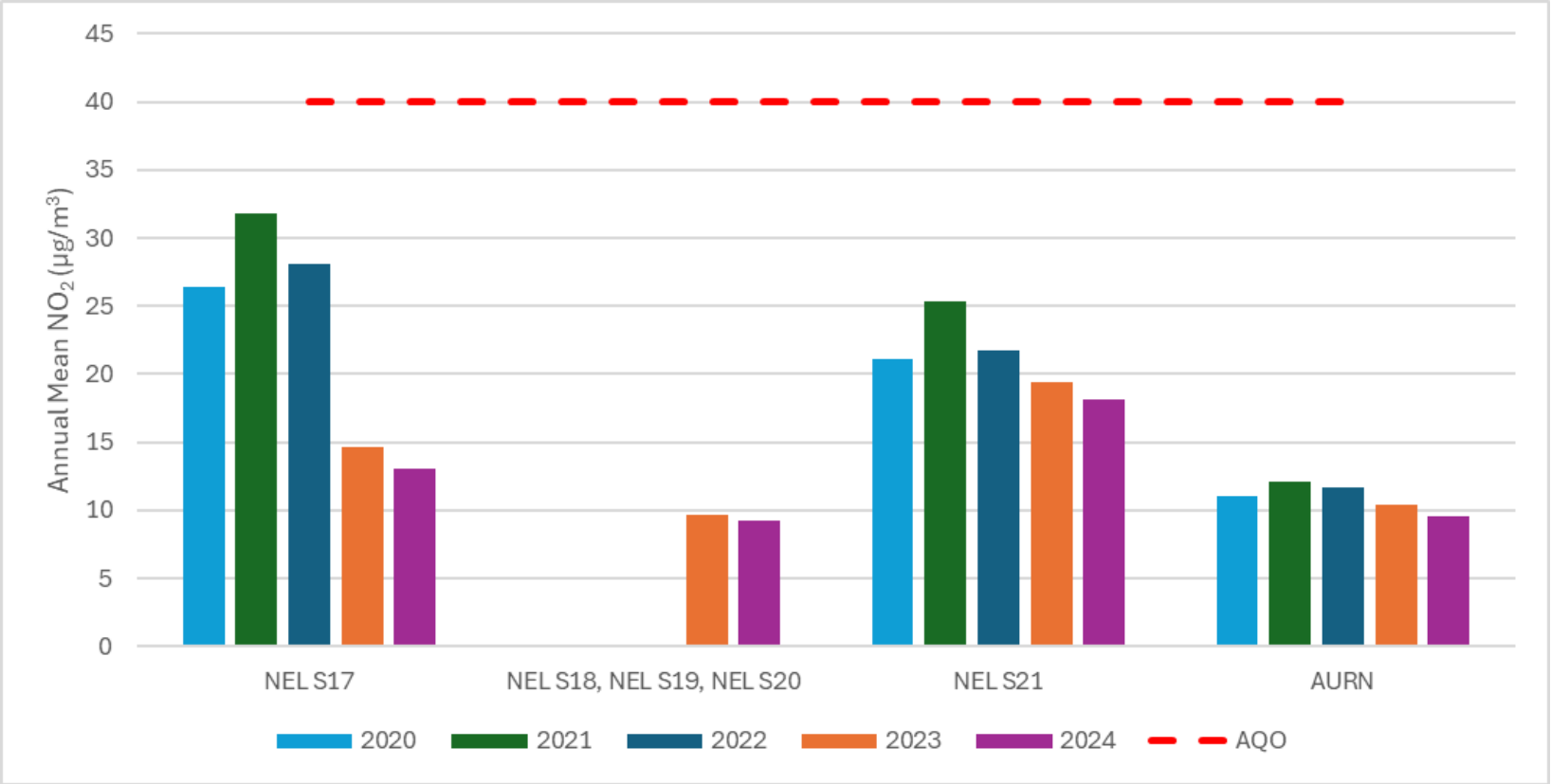
Diffusion tube monitoring at locations NEL S2 – S6 and S9 – S10 commenced monitoring in 2023.

Figure A.3 – Trends in Annual Mean NO_2 Concentrations within Grimsby (not within AQMA part 2)



Diffusion tube monitoring at locations NEL S31 and S35 commenced monitoring in 2023 and S36 and S37 were set up in 2024.

Figure A.4 – Trends in Annual Mean NO_2 Concentrations within Immingham



Diffusion tube monitoring at locations NEL S18 – S20 commenced monitoring in 2023.

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
AURN	518277	415116	Urban Background	99.0	99.0	0	0	0	0	0
Cleethorpe Road	527767	410414	Roadside	94.1	94.1	0	0	0	0	0
Peaks Parkway	527540	408080	Roadside	99.8	99.8	0	0	0	0	0

Notes:

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

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

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

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

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

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
AURN	518277	415116	Urban Background	99.9	99.9	-	-	12.7	11.9	11.7

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

Notes:

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

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

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

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

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

Figure A.5 – Trends in Annual Mean PM_{10} Concentrations

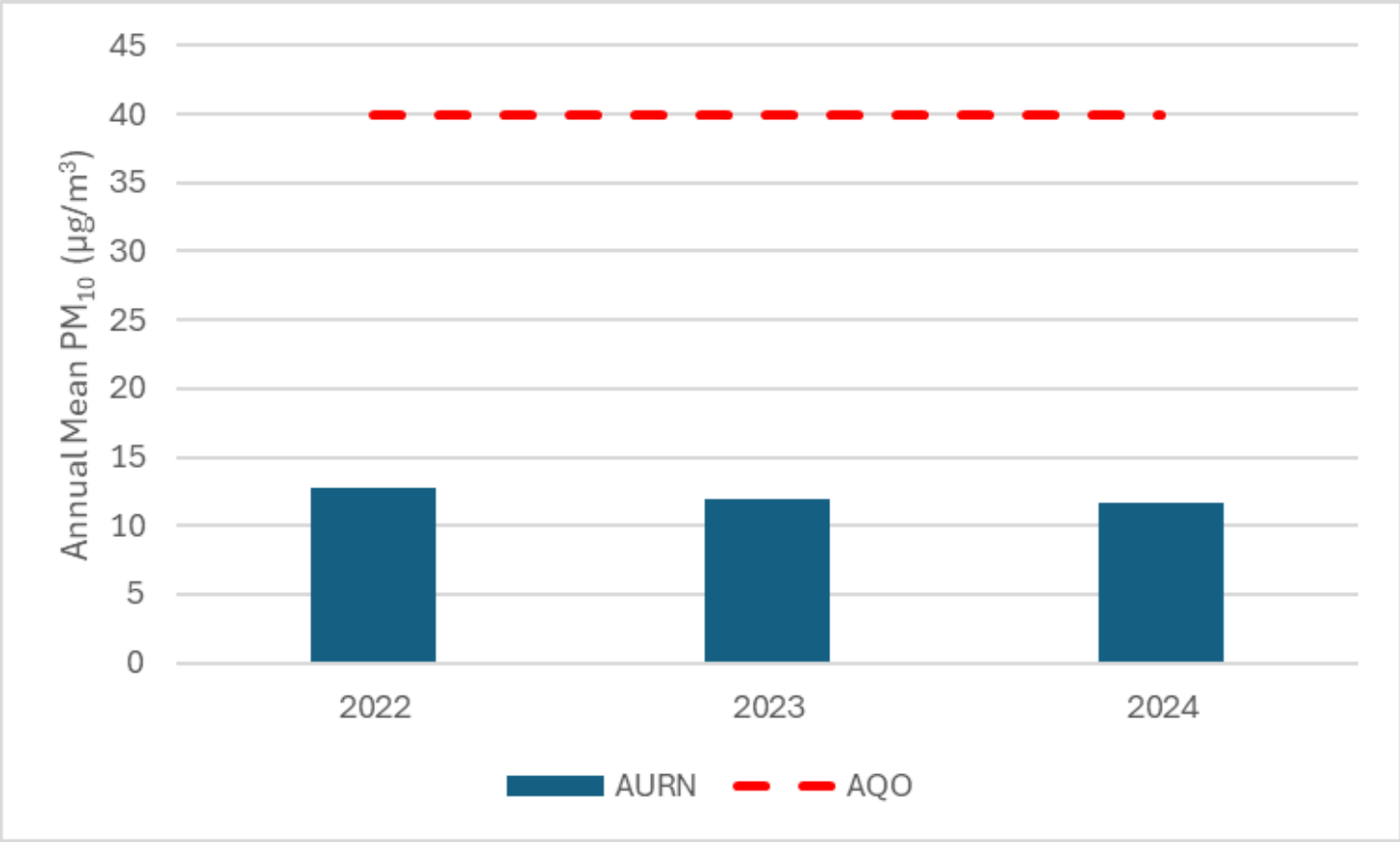


Table A.7 – 24-Hour Mean PM_{10} Monitoring Results, Number of PM_{10} 24-Hour Means > 50µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
AURN	518277	415116	Urban Background	99.9	99.9	-	-	0	0	0

Notes:

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

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

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

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

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

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
AURN	518277	415116	Urban Background	99.9	99.9	-	-	7.6	7.0	7.0

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

Notes:

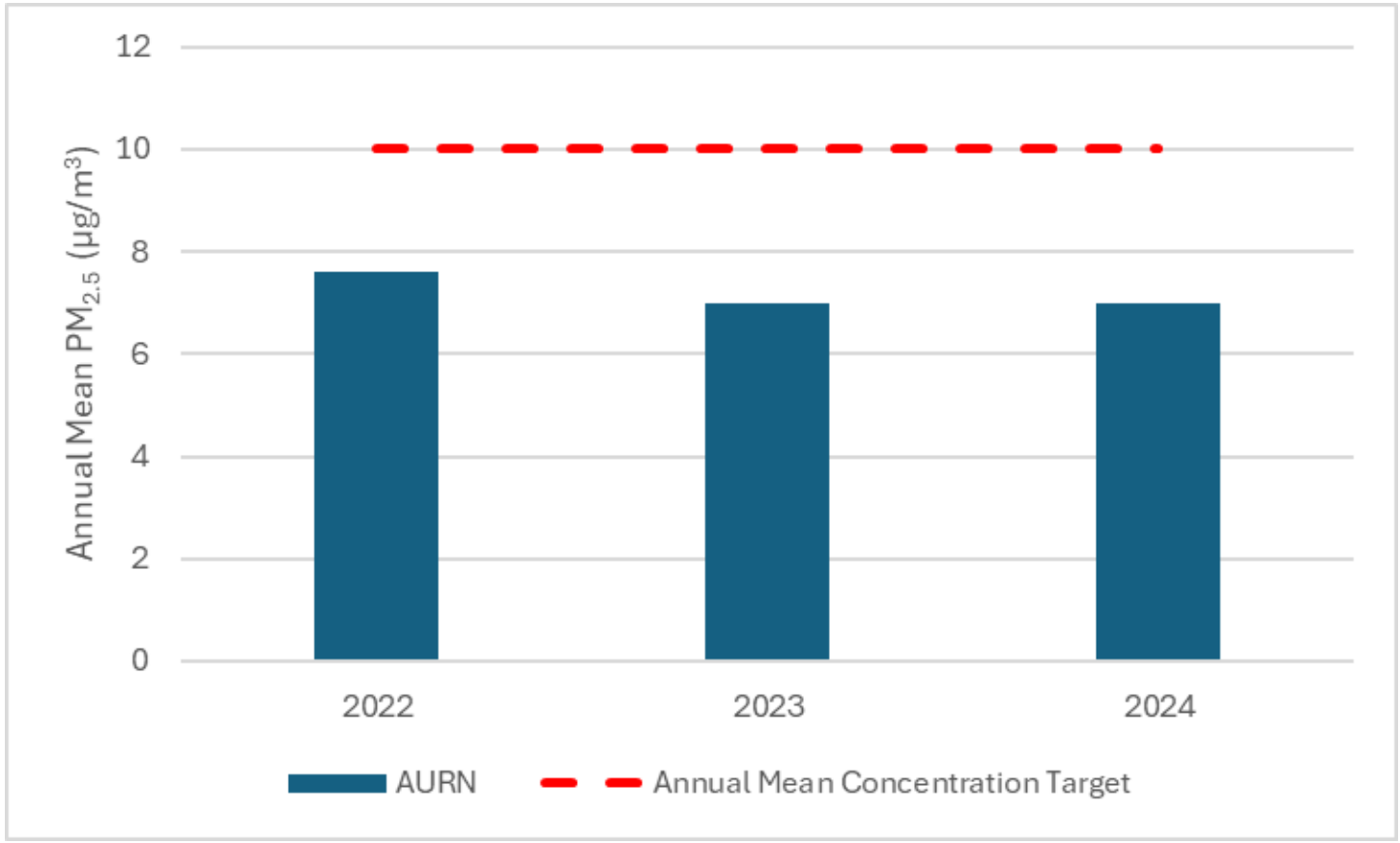
The annual mean concentrations are presented as $\mu g/m^3$.

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

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

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

Figure A.6 – Trends in Annual Mean $PM_{2.5}$ Concentrations



Appendix B: Full Monthly Diffusion Tube Results for 2024

Please note, monitored concentrations in December 2024 were considered to be anomalous and therefor in accordance with guidance from the LAQM helpdesk were removed from the dataset. Annualisation was therefore undertaken where necessary where data capture was below 75%, as detailed below in Table C1.

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

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.78)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
NEL S1	527095	409367	35.0	30.4	35.2	30.5	32.6	31.9	34.5	34.9	35.3	37.8	45.6		34.9	27.2	-	
NEL S2	526185	409136	22.9	21.9	18.6	19.5	20.5	18.5	17.4	16.0	25.5		27.0		20.8	16.2	-	
NEL S3	525461	408347	22.6	23.7	21.3	18.8	18.0	17.1	17.7	16.0	19.9	22.7	28.0		20.5	16.0	-	
NEL S4	526482	407708	35.7	29.8	27.2	29.4	27.5	26.6	23.3	24.5	32.9	27.5	41.3		29.6	23.1	-	
NEL S5	526504	406678	19.5	31.6	25.4	24.7	25.5	24.6	19.8	20.1	23.7	23.2	24.6		23.9	18.6	-	
NEL S6	526427	404055	21.5	19.8	17.8	13.3	18.1	15.8	16.5	15.9	20.7	22.0	20.1		18.3	14.3	-	
NEL S7	527716	404516	24.0	33.8	23.6	18.8	17.5	16.7	15.2	18.4	10.4	23.1	29.1		21.0	16.4	-	
NEL S8	527748	404396	17.6	14.5	14.4	13.1	16.7	11.3	12.1	9.0	17.0	18.2	20.4		14.9	11.7	-	
NEL S9	530760	408378	27.0	24.0	19.8	20.8	19.3	19.7	17.5	20.0	19.3	21.1	29.4		21.6	16.9	-	
NEL S10	530288	408898	27.1	24.0	17.0	19.1	22.1	23.3	22.2	17.1	24.3		25.8		22.2	17.3	-	
NEL S11	529532	406835	24.4	22.5	21.8	16.2	16.0				18.7		21.4		20.1	14.4	-	
NEL S12	528891	408078	27.1	22.2	21.7	16.4	20.0	19.2		14.4	20.7	18.4	24.1		20.4	15.9	-	
NEL S13	527540	408080		26.6	27.8	19.7	23.5	16.9		12.2	23.1	22.1	22.4		-	-	-	Triplicate Site with NEL S13, NEL S14 and NEL S15 - Annual data provided for NEL S15 only
NEL S14	527540	408080		25.5	27.6	20.1	21.7	16.9	13.3	13.5	23.5	25.4	26.2		-	-	-	Triplicate Site with NEL S13, NEL S14 and NEL S15 - Annual data provided for NEL S15 only
NEL S15	527540	408080		27.6	27.5	14.8	20.3	15.1	12.3	12.9	21.3	25.3	27.4		20.8	16.3	-	Triplicate Site with NEL S13, NEL S14 and NEL S15 - Annual data provided for NEL S15 only
NEL S16	523284	409883	21.3	19.8	15.5		16.4	17.4	16.1	13.3	13.2	19.9	22.9		16.7	13.0	-	
NEL S17	518108	414533	22.1			17.1	18.7	16.0	10.8	14.5	7.6	18.7	25.5		19.3	13.1	-	
NEL S18	518277	415116	18.7	12.4	13.4		10.6	8.7	8.0	7.4	13.8	12.7	15.8		-	-	-	Triplicate Site with NEL S18, NEL S19 and NEL S20 - Annual data provided for NEL S20 only
NEL S19	518277	415116	17.7	12.9	11.2				8.6	7.2	11.9	11.3			-	-	-	Triplicate Site with NEL S18, NEL S19 and NEL S20 - Annual data provided for NEL S20 only

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.78)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
NEL S20	518277	415116	16.1		13.3		10.5	8.4	8.5		13.5	12.3	15.5		11.8	9.2	-	Triplicate Site with NEL S18, NEL S19 and NEL S20 - Annual data provided for NEL S20 only
NEL S21	519193	415279	33.4	26.9	23.7	23.7	25.5	21.3	19.8	17.7			16.8		23.2	18.1	-	
NEL S22	526077	410124	40.9	32.9	27.6	23.3	26.0	21.9	23.0	23.5	24.9	31.6	36.3		28.4	22.1	-	
NEL S23	527182	410092	23.1	35.7	31.0	22.8	25.0	24.0	21.3	24.0	22.3	30.2	37.3		27.0	21.0	-	
NEL S24	527761	410425	35.5	51.0	40.2	31.4	36.3	33.6	25.4	36.8	30.5	46.5	54.0		-	-	-	Triplicate Site with NEL S24, NEL S25 and NEL S26 - Annual data provided for NEL S26 only
NEL S25	527761	410425	43.8	48.3	36.4	32.3	36.5	34.7	25.1	37.4		56.8	50.1		-	-	-	Triplicate Site with NEL S24, NEL S25 and NEL S26 - Annual data provided for NEL S26 only
NEL S26	527761	410425	37.7	57.6	38.4	31.8	33.5	36.2	25.5	35.3	31.5	58.1	49.6		39.1	30.5	-	Triplicate Site with NEL S24, NEL S25 and NEL S26 - Annual data provided for NEL S26 only
NEL S27	527754	410445	41.7	32.6	32.6	32.0	27.8	24.2	19.7	26.3	38.9	32.3	40.9		31.7	24.7	-	
NEL S28	527789	410438	38.5	33.6	23.4	25.3	23.8	28.3	22.1	18.7	35.8	33.6	43.3		29.7	23.1	-	
NEL S29	527693	410413	30.7	32.9	30.1	29.6	26.5	18.2	13.8	27.5	29.7	27.9	41.0		28.0	21.8	-	
NEL S30	528725	410102	32.1	38.3	30.0	24.6	26.3	28.8	29.5	30.1	24.7	34.4	30.9		30.0	23.4	-	
NEL S31	527627	409563	30.5	26.7	20.9	19.2	20.2	20.0		16.9	23.3	22.5	22.6		22.3	17.4	-	
NEL S32	527403	408666	30.9	31.9	16.6	23.1	25.0	24.2	24.0	24.3	27.0	29.1	33.7		26.3	20.5	-	
NEL S33	527183	409647	29.8	31.1	29.8	22.6	21.0	19.8	23.9	23.3		32.4	32.3		26.6	20.7	-	
NEL S34	527181	409513	23.3	34.0	11.2	25.2	29.2	25.5	26.5	21.4	27.2	29.0	32.8		25.9	20.2	-	
NEL S35	527288	409223	22.7	18.7	11.8	12.7	15.7	14.3	13.2	12.7	18.0	20.4	27.2		17.0	13.3	-	
NEL S36	530576	408871	22.6	14.5	19.0	14.3	13.6	17.3	16.3	17.3	18.1	19.8	29.1		18.4	14.3	-	
NEL S37	530488	408829	22.6	27.3	21.5	13.7	18.8	18.9	18.3	19.5	18.7	22.3	26.3		20.7	16.2	-	

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

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

☐ **Local bias adjustment factor used.**

☒ **National bias adjustment factor used.**

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

☒ **North East Lincolnshire confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.**

Notes:

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

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

See Appendix C for details on bias adjustment and annualisation.

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

New or Changed Sources Identified Within North East Lincolnshire During 2024

The North East Lincolnshire Council Environmental Protection department reviewed over 742 planning applications during 2024.

Air quality assessments were requested for seven developments in 2024 including:

- DM/0022/24/PREAPP Energy Park Way, Grimsby
- DM/0679/24/FUL Haven Mill, Garth Lane, Grimsby, North East Lincolnshire
- DM/0350/24/PREAPP Units 3 - 15 Osborne Street, Grimsby
- DM/0351/24/PREAPP Multi Storey Car Park, Abbey Walk, Grimsby
- DM/0747/24/FUL 451 - 465 Cleethorpe Road Grimsby North East Lincolnshire
- DM/0388/24/PREAPP Land To East Of Millenium Farm, South Of Humberston Avenue
- DM/0957/24/REM Land Off Newton Way Stallingborough North East Lincolnshire

In addition, air quality assessments were submitted for six developments in 2024, including:

- DM/0579/24/FUL Carbon fibre processing facility - land at Energy Park Way, Grimsby
- DM/0761/23/FUL Proposed residential development, Land off Louth Road.
- DM/0914/24/FUL Proposed residential development, Former Lindsey Lower School, Playing Fields, Cleethorpes
- DM/1026/24/OUT Land Parcel Kiln Lane Stallingborough North East Lincolnshire
- DM/1241/23/FUL Proposed residential development on Land off Cambridge Road.

- Environmental Statement - Chapter 14 Air Quality -Assessment of the likely significant effects of the Viking CCS pipeline

Development Consent Order

- Grimsby to Walpole – DCO EIA Scoping

Additional Air Quality Works Undertaken by North East Lincolnshire Council During 2024

North East Lincolnshire revoked the Grimsby AQMA on 22nd May 2024 after more than five years of compliance within the AQMA.

QA/QC of Diffusion Tube Monitoring

The diffusion tubes used during 2024 were supplied and analysed by SOCOTEC Didcot and were prepared using the 50% TEA in acetone preparation method. SOCOTEC Didcot, a UKAS accredited laboratory, participate in the AIR-PT scheme for NO_2 diffusion tube analysis and Annual Field Intercomparison Exercise. These provide strict criteria relating to performance that participating laboratories must meet, thereby ensuring that the reported NO_2 concentrations are of a high calibre. In the first four rounds of results during 2024, running form January – October (AIR-PT AR062, AR063, AR064 and AR066), SOCOTEC Didcot were awarded a score of 100% – the percentage score is an indication of the results deemed satisfactory based upon the z-score of < ±2. At the time of writing this report, the AIR-PT results for October to December 2024 were not available (full details of the precision results are available here).

For the months of 2024 in which data was obtained (January – December), all diffusion tubes were deployed in line with the national monitoring calendar (±2 days either side of the changeover date). Therefore, no single diffusion tube site was exposed beyond the 4-5 week recommendation of LAQM TG(22), providing an overall high level of data capture for 2024.

Diffusion Tube Annualisation

Annualisation was undertaken for diffusion tube NEL S11 which had a data capture of 56.6% in 2024. Annualisation was undertaken in accordance with TG.22 and the LAQM Diffusion Tube Data Processing Tool.

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

Site ID	Annualisation Factor Sheffield Tinsley	Annualisation Factor Immingham Woodlands	Annualisation Factor Sheffield Devonshire Green	Annualisation Factor Hull Freetown	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean
NEL S11	0.9203	0.8914	Less than 85% data capture	0.9353	0.9157	20.1	18.4

Diffusion Tube Bias Adjustment Factors

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

North East Lincolnshire Council have applied a national bias adjustment factor of 0.78 to the 2024 monitoring data. A summary of bias adjustment factors used by North East Lincolnshire Council over the past five years is presented in Table C.2.

A local bias adjustment factor of 0.72 was also calculated, based on concentrations obtained at three collocated sites. The national bias adjustment factor was slightly more conservative than the local adjustment factor and therefore was applied to this year's results.

Table C.2 – Bias Adjustment Factor

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	Local	n/a	0.79
2021	Local	n/a	0.88
2020	National	03/21	0.77

Figure C.1 – Bias Adjustment Spreadsheet

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

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

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

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

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

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

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

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

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

Analysed By[1]	Method (To undo your selection, choose (All) from the pop-up list)	Year[2] (To undo your selection, choose (All))	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m³)	Automatic Monitor Mean Conc. (Cm) (µg/m³)	Bias (B)	Tube Precision[5]	Bias Adjustment Factor (A) (Cm/Dm)
SOCOTEC Didcot	50% TEA in acetone	2024	R	Cambridge City Council	11	20	15	31.0%	G	**0.76**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Cardiff Council / Shared Regulatory Services	9	35	31	14.2%	G	**0.88**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Ipswich Borough Council	9	24	20	21.0%	G	**0.83**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Ipswich Borough Council	11	36	26	37.9%	G	**0.73**
SOCOTEC Didcot	50% TEA in acetone	2024	UB	City Of York Council	11	13	11	16.0%	P	**0.86**
SOCOTEC Didcot	50% TEA in acetone	2024	R	City Of York Council	11	22	18	22.9%	G	**0.81**
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	Marylebone 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 Distric Council	10	19	15	24.3%	G	**0.80**
SOCOTEC Didcot	50% TEA in acetone	2024	UB	Wirral Council	9	14	12	19.9%	G	**0.83**
SOCOTEC Didcot	50% TEA in acetone	2024	R	Derry City And Strabane District Council	11	28	32	-11.8%	G	**1.13**
SOCOTEC Didcot	50% TEA in acetone	2024	UB	Derry City And Strabane District Council	11	11	7	58.1%	G	**0.63**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Horsham District Council	11	22	17	31.1%	G	**0.76**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Leeds City Council	10	36	28	32.5%	G	**0.75**
SOCOTEC Didcot	50% TEA in Acetone	2024	KS	Leeds City Council	11	29	20	42.7%	G	**0.70**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Leeds City Council	11	24	18	36.4%	G	**0.73**
SOCOTEC Didcot	50% TEA in Acetone	2024	UC	Leeds City Council	10	25	19	31.2%	G	**0.76**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Huntingdonshire District Council	10	28	23	21.1%	G	**0.83**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	North East Lincolnshire Council	11	39	21	84.1%	G	**0.54**
SOCOTEC Didcot	50% TEA in Acetone	2024	UB	North East Lincolnshire Council	10	12	10	20.0%	G	**0.83**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	North East Lincolnshire Council	11	21	18	15.7%	G	**0.86**
SOCOTEC Didcot	50% TEA in acetone	2024		**Overall Factor[3] (33 studies)**				**Use**		**0.78**

The local bias adjustment factor was calculated using the Diffusion Tube Data Processing Tool for three triplicate locations. Precision was poor overall for Peak Parkway and Immingham Woodlands which includes the removal of lower than expected December 2024 diffusion tube results. As advised by the LAQM helpdesk, these results were

removed, which was also the methodology used for the bias adjustment factor study. The local bias adjustment factors ranged from 0.54 at Cleethorpes Road which suggests a high over prediction by the diffusion tubes compared to the reference analyser and 0.85 at Peak Parkway.

Table C.3 – Local Bias Adjustment Calculation

	Local Bias Adjustment Input 1 Peak Parkway	Local Bias Adjustment Input 2 Immingham Woodlands	Local Bias Adjustment Input 3 Cleethorpe Road
Periods used to calculate bias	9	9	11
Bias Factor A	0.85 (0.77 - 0.94)	0.83 (0.79 - 0.86)	0.54 (0.45 - 0.9)
Bias Factor B	18% (6% - 30%)	21% (16% - 26%)	79% (45% - 123%)
Diffusion Tube Mean (µg/m^3)	21.7	11.4	39.1
Mean CV (Precision)	7.0%	4.8%	5.2%
Automatic Mean (µg/m^3)	18.4	9.4	21.2
Data Capture	100%	99%	94%
Overall Data Capture	98%	97%	92%
Adjusted Tube Mean (µg/m^3)	18 (17 - 20)	9 (9 - 10)	21 (18 - 27)

Notes:

A single national bias adjustment factor has been used to bias adjust the 2024 diffusion tube results as this was higher and therefore conservative compared to the local bias adjustment factor calculated.

NO_2 Fall-off with Distance from the Road

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

No diffusion tube NO_2 monitoring locations within North East Lincolnshire required distance correction during 2024.

QA/QC of Automatic Monitoring

Air quality measurements from the Cleethorpes Road and Peaks Parkway automatic monitoring stations are validated and ratified by Air Quality Data Management (AQDM) to the standards described in LAQM TG.22. Regular calibrations with certified gas standards are used to measure the zero and sensitivity. Ratification of the data generally occurs at three, six or twelve moth intervals; however, unexpected faults can be identified during any routine servicing or independent audits which are often carried out at six month intervals.

The Immingham Woodlands Avenue automatic monitoring station is part of the AURN operated by Bureau Veritas. The AURN have appointed LSO's and servicing is conducted by Acoem UK on a six monthly basis. Audits are conducted by Ricardo-AEA Ltd annually. Live and historic data is available through the Defra website.

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

The Palas Fidas 200 monitors utilised at the AURN Immingham site do not require the application of a correction factor for PM_{10} and in accordance with Method 11, $PM_{2.5}$ data requires correction by a factor of 1.06. The ratified data published on UK-AIR has already had the correction factor is applied and therefore no further correction is required.

Automatic Monitoring Annualisation

All automatic monitoring locations within North East Lincolnshire Council recorded data capture of greater than 75% therefore it was not required to annualise any monitoring data. In addition, any sites with a data capture below 25% do not require annualisation.

NO_2 Fall-off with Distance from the Road

No automatic NO_2 monitoring locations within North East Lincolnshire Council required distance correction during 2024.

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

Figure D.1 – Map of Monitoring Sites in Immingham

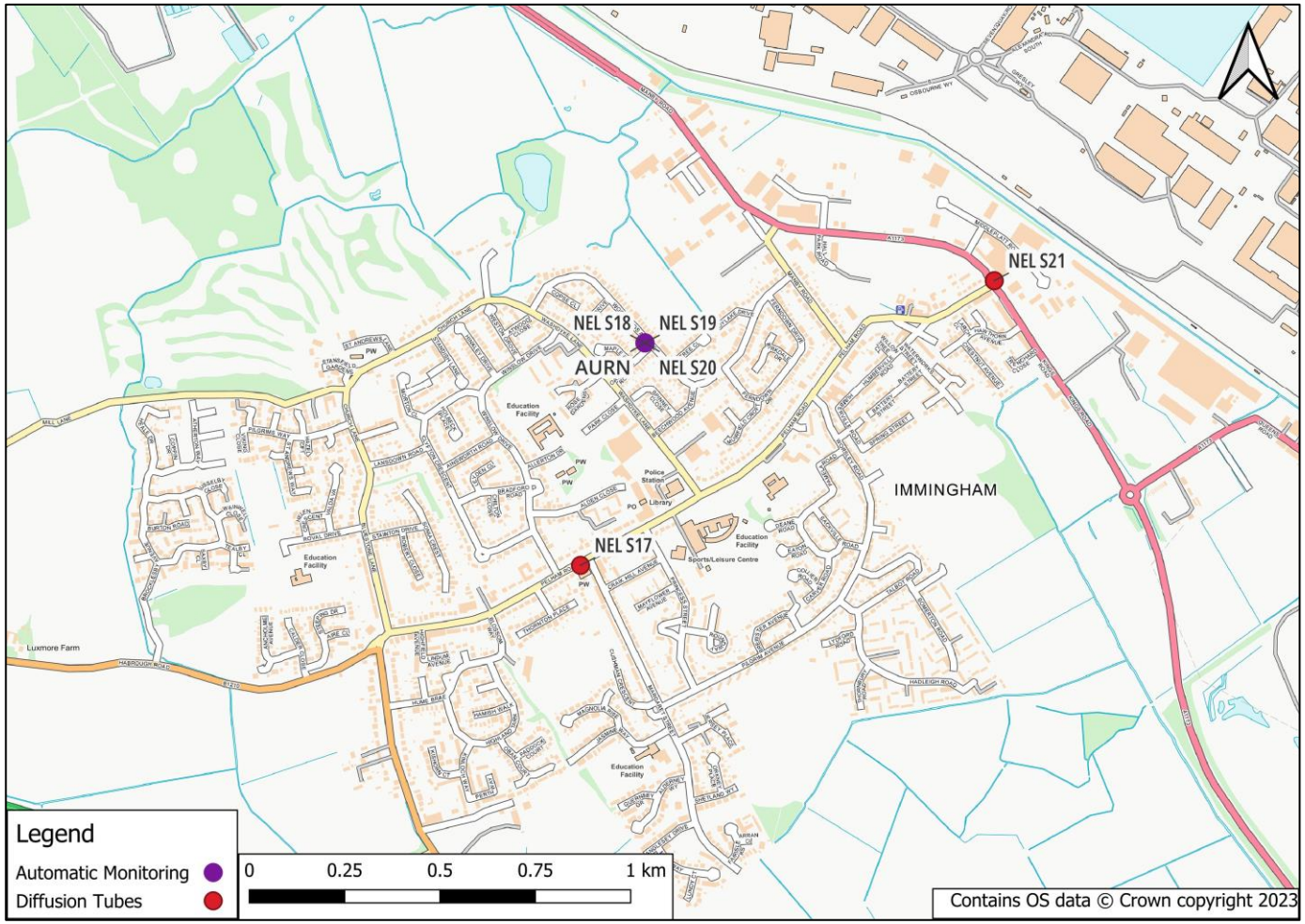


Figure D.2 – Map of Non-Automatic Monitoring Sites in Grimsby

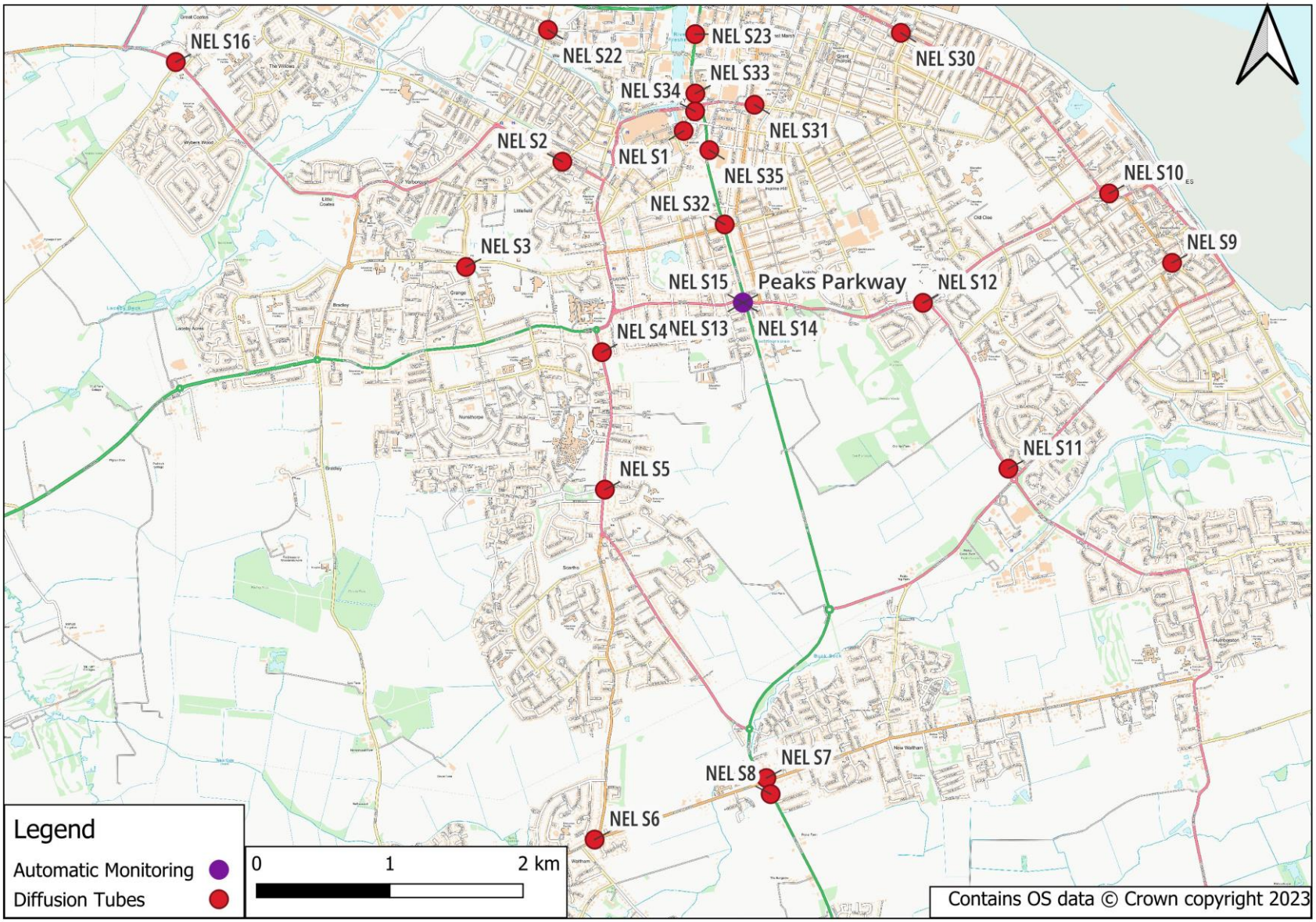
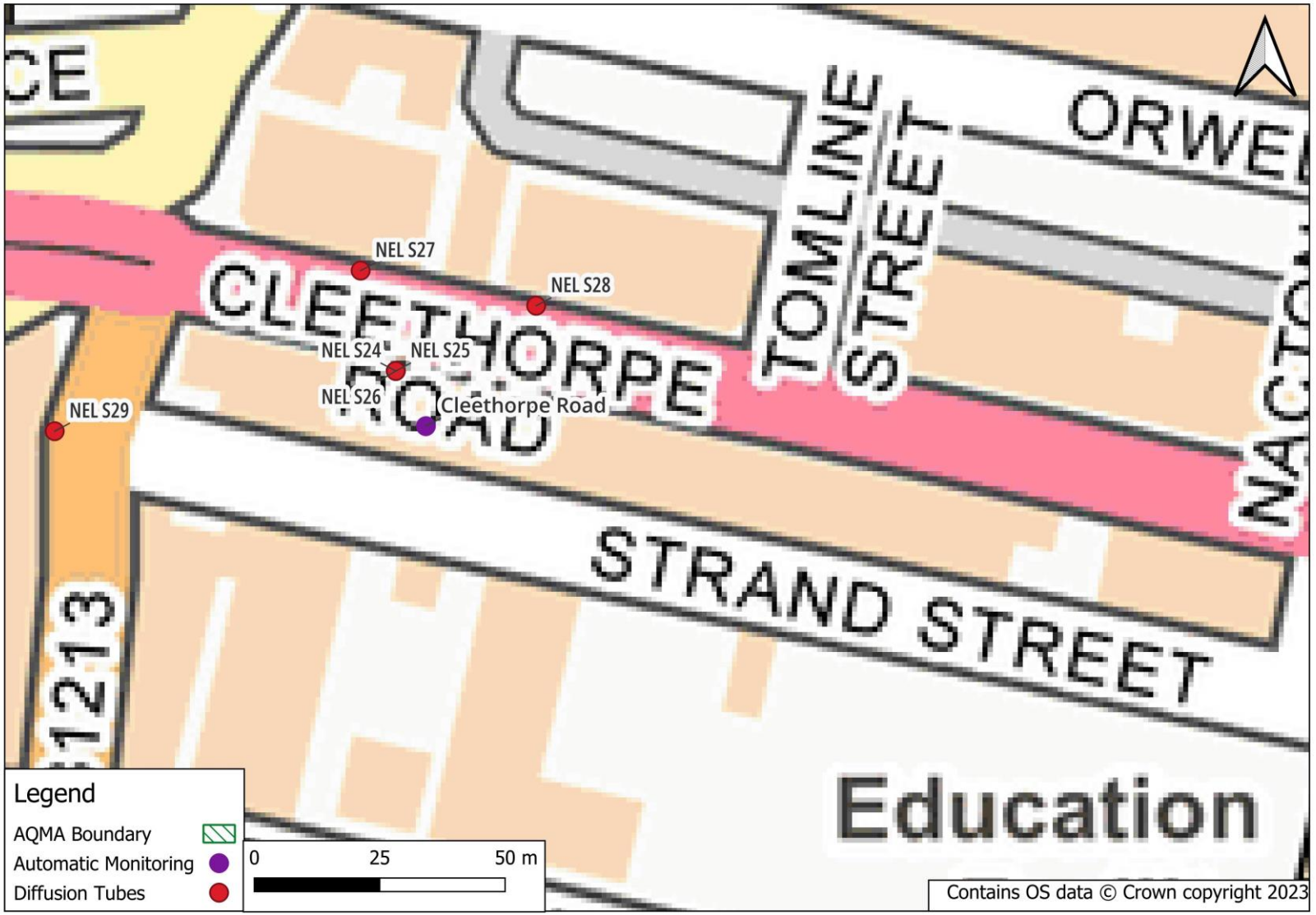


Figure D.3 – Map of Non-Automatic Monitoring Sites in Grimsby AQMA (revoked in May 2024)



Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England

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

Glossary of Terms

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

References

- Local Air Quality Management Technical Guidance LAQM.TG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Local Air Quality Management Policy Guidance LAQM.PG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Chemical hazards and poisons report: Issue 28. June 2022. Published by UK Health Security Agency
- Air Quality Strategy – Framework for Local Authority Delivery. August 2023. Published by Defra.
- Defra. Environmental Improvement Plan 2023, January 2023
- DfT. The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy, July 2018
- North East Lincolnshire Council. Natural Assets Plan 2021. 2021 available at https://www.nelincs.gov.uk/assets/uploads/2022/02/Natural-Assets-Plan.pdf
- North East Lincolnshire Council. The Net Zero Carbon Roadmap. Available at https://www.nelincs.gov.uk/keeping-our-area-clean-and-safe/climate-change/net-zero-carbon-roadmap/
- North East Lincolnshire Council. Air Quality Action Plan. 2020.
- Local Air Quality Management https://laqm.defra.gov.uk/air-quality/air-quality-assessment/qa-qc-framework/
- Defra. UK AIR available at https://uk-air.defra.gov.uk/
- Defra. Diffusion Tube Data Processing Tool version 5.4, published May 2025
- Defra, Automatic Data Processing Tool version 1.0.4, published May 2025