DARLINGTON
Borough Council

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 Environmental Health Section of Darlington Borough Council with the support and agreement of the following Sections:

- Licensing
- Planning Policy
- Sustainable Transport
- Fleet Management
- Car Parking
- Public Health

This ASR has been approved by Councillor McEwan, Economy Portfolio Holder and Councillor Roche, Health and Housing Portfolio Holder.

This ASR has been signed off by a Director of Public Health.

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Executive Summary: Air Quality in Our Area

Air Quality in Darlington Borough Council

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

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

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

Table ES 1 - Description of Key Pollutants

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

The borough of Darlington (population circa 108,000) is located in the northeast of England, in the County of Durham. The borough consists of the large market town of Darlington as well as several other smaller villages. Darlington Borough Council is part of the Tees Valley Combined Authority (TVCA), a partnership of five authorities (Darlington, Hartlepool, Middlesbrough, Redcar & Cleveland and Stockton-on-Tees) that work closely together and alongside other partners in making local decisions.

The annual review and assessment process has consistently concluded that air quality across the borough is generally good when compared with Government objectives, and there are currently no Air Quality Management Areas (AQMAs) declared within the borough.

In contrast to the other four Tees Valley Combined Authority councils, Darlington Borough Council does not have any large industrial areas within its borders. The main source of air pollution within the borough that gives rise to increased pollutant concentrations is road traffic emissions from the main arterial road network, which connects the relatively densely populated centre of Darlington itself out to its more rural surroundings.

Actions to Improve Air Quality

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

The Environmental Health team at Darlington Borough Council published the Council's first Local Air Quality Strategy in November 2024. This was picked up by a local radio station and featured in a short news bulletin on Hits Radio Teesside in December 2024, as well as in an article on the News section of the Council webpage. A video with Councillors and a member of the Environmental Health team promoting the launch of the strategy was also shared on social media platforms. The Strategy sets out how the Council looks to improve air quality and includes raising awareness of particular issues through educational campaign work, continuing to consider air quality impacts associated with development and complying with legislation in terms of investigating complaints of potential statutory nuisances and enforcement of smoke control area requirements.

The Council continued the 'Burn Right' campaign over Autumn/Winter 2024/25, which orginally launched in Autumn 2023. The campaign aims to remind and educate people on smoke control area requirements in Darlington and the importance of burning suitable fuels. The campaign work over Autumn/Winter 2024/25 involved further articles in the One Darlington magazine, social media messages, website updates, displaying posters in fuel retailers, as well as displaying the campaign graphics on a digital billboard close to a main roundabout in the Town Centre. The message was disseminated to Council staff via the weekly Briefing. The Council also promoted Chimney Fire Safety Week 2024 (supported by HETAS) linking in the importance of properly maintaining appliances and using the correct fuel with possible health risks. A 'Scary facts of using a log burner' news article also featured on the Council news webpage and social media platforms in the run up to Halloween as another way to try and engage with the public. The campaign also

signposted people to information available as part of Defra's Burn Better, Breathe Better campaign. Further details on the local campaign are included in Appendix F.

The 'Care about your air' anti idling campaign was also relaunched over Winter 2024/25. A local primary school got on the 'banner wagon' with school children helping to display a large campaign banner on the school railings, reminding people to switch their engines off when parked. The children also handed out campaign leaflets to parents on the school run and approached anyone sat waiting with their engines running asking them to switch it off. This was picked up by ITV and featured on the regional Tyne Tees news, as well as BBC Radio Tees. Reid Street Primary School have produced a Wakelet relating to the campaign work which can be found at the following link: https://wakelet.com/wake/_CHjZKlZdOiDgT2R4K0ML. A drone was also used at one primary school to capture images of children spelling out 'We love clean air' as part of the campaign.

The Council also published its first ever Electric Vehicle Charging Policy in February 2025. This policy aims to explore some of the concerns about owning and charging an electric vehicle and looks at working towards finding effective and safe solutions to help more people enjoy the benefits of owning one.

Other actions to reduce the impact of vehicle emissions within Darlington are principally taken in conjunction with local authorities within the TVCA area. In 2020, TVCA produced a Strategic Transport Plan (STP) for the period up to 2030. This acts as a Local Transport Plan for all five Tees Valley authorities. The STP concentrates on the following areas:

- Reducing traffic congestion at peak times through improved network management and road improvements.
- Encouraging local bus companies to review services with particular emphasis on access to new and emerging employment opportunities, and to renew their fleet on an on-going basis.
- Encouraging wider transport choices by improving pedestrian, cycling and public transport, including rail.
- Encouraging the provision of a low emission vehicle infrastructure through the planning regime.

In 2022/23 the Darlington Transport Plan, a Town Centre Transport Plan and Parking Strategy were adopted by the Council. One of the objectives of Darlington's Transport Plan (2022 – 2030) is to reduce the impact of transport on the environment and support health and wellbeing. This strategy supports the delivery of the Tees Valley STP.

The Darlington Local Plan 2016 – 2036 was also adopted in February 2022 and seeks to ensure the borough's need for housing, a thriving economy, community facilities and infrastructure are met, as well as safeguarding the environment, adapting to climate change and securing good design.

In addition, the Local Plan also requires, in the case of development of 150 or more homes and all other non-residential 'major' development, the submission of a Health Impact Assessment (HIA) as part of the application to explain how health considerations have informed the design. This includes air quality considerations. The Council (including Public Health, Planning Policy, Development Management and Environmental Health) have recently produced a Development Guidance Note and Comprehensive Health Impact Assessment tool (January 2024).

The Local Plan also covers Improving Access and Accessibility (Policy IN 2) acknowledging that development that offers better access to all forms of travel will help the Borough to become more sustainable, healthy, green and prosperous. With sustainable modes of travel such as walking, cycling, public transport and facilities for alternative fuel vehicles being promoted through travel planning as well as good design. Travel Plans are a requirement of the local plan (Policy IN 3) for any development that would result in potentially significant impacts on travel. Updated Travel Plan Guidance was produced by the Council in 2024. Travel plans aim to ensure developments minimise negative impacts of traffic and facilitate and promote the use of alternative sustainable transport, ultimately aiming to change the behaviour of individuals to use more sustainable modes of travel and maintain that change.

The measures discussed above will continue to contribute to further reductions in air pollution within the borough of Darlington.

A co-benefit of some of the actions will also be to help the Borough reduce overall carbon emissions in response to the Council's declaration of a climate emergency, as well as linking with the Council Plan 2024-2027 and contributing to the priority 'Local Environment: A well-connected, clean and sustainable borough'.

Conclusions and Priorities

During 2024 no exceedances of the NO_2 annual mean objective were recorded within the borough of Darlington. Pollution concentrations continue to be relatively low and monitoring will continue to ensure that any concentration trends can be identified. NO_2 concentrations at most diffusion tubes sites have decreased since 2020 to 2024, with only marginal increases at the other sites (maximum increase between 2020 and 2024 is 2.4µg/m^3 Diffusion Tube D2).

Darlington Borough Council will continue to assess new developments submitted through the planning department to ensure that any proposed developments are not detrimental to local air quality. In addition, any new industrial processes will be regulated in line with The Environmental Permitting (England and Wales) Regulations 2016 (as amended).

Darlington Borough Council will continue to co-operate with the four other Tees Valley Councils in implementing measures to further improve air quality. The council will also continue to identify in more detail the sources of fine particles where possible, to see if any additional local action can cost effectively reduce emissions/concentrations.

Priorities will be guided by the Local Air Quality Strategy, which is now in place, to ensure air quality remains a high-profile issue and which demonstrates the Council's commitment to bringing about improvements in air quality as opportunities arise, to protect public health and the environment.

How to get Involved

The public can engage with Darlington Borough Council via their website which contains further local information on the following:

- Air quality monitoring and reporting;
- Campaign work and air quality news;
- Environmental Permitting;
- Smoke control areas; and
- Garden bonfires.

Recent updates have been made to the air quality/Environmental Health pages of the Council website to give more emphasis to the campaign work carried out and there is now an air quality news section, see https://www.darlington.gov.uk/environmental-health/pollution/care-for-clean-air/.

The public can help improve air quality in the local area by considering the following steps:

- Getting on board with the ongoing campaign work targeting engine idling and wood burning.
- Using more sustainable travel choices like walking and cycling as much as possible. While we acknowledge people lead busy lives and will often opt for convenient options, even small steps, such as walking to the shop or on the school run once a week, will ultimately help.

- Avoid having garden bonfires. There are alternative methods for correctly disposing of garden waste.

The Tees Valley Combined Authority website also promotes and provides information on travelling sustainably in the Borough of Darlington, and the wider Tees Valley. It includes information on:

- Walking and cycling routes and hubs which offer a range of services and advice to encourage more active travel including things such as free bike MOTs and repairs;
- Bus and rail operators including journey planning;
- Electric vehicles including information on available grant schemes and maps of charging points.

Darlington Borough Council Travel Advisors and the Darlington Active Travel (Walking and Cycling) Hub also offer advice to residents, businesses and the public for all journeys including helping people choose greener, healthier forms of travel.

Case Study – Cummins, Darlington

Cummins, a major engine manufacturer in Darlington employs around 1,600 people. The recent establishment (in 2024) of a new Powertrain Test Facility expands their current engine testing capabilities and enables them to test a wider range of vehicles and machinery powered by hydrogen, renewable natural gas, sustainable diesel or battery electric, and is a key part of their Destination Zero Strategy, to reduce greenhouses gases and air quality impacts of their products. The new facility supports the development of cleaner power solutions and also provides local environmental benefits as part of its daily operation. The company also has a cycle to work scheme which offers salary sacrifice for employees to purchase a bike, with over 2000 retailers to choose from, both online and on the high street. An event is also planned at the company in June 2025 which is to promote cycling to work/physical activity and other ways of travelling to and from work. Darlington Borough Council Travel Advisors will be attending, and it is hoped that Sustrans will also attend to support the event.

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1 Local Air Quality Management

This report provides an overview of air quality in Darlington Borough 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 Darlington Borough 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.

Darlington Borough currently does not have any declared AQMAs. A local Air Quality Strategy is in place to prevent and reduce polluting activities. The Local Air Quality Strategy is available at: https://www.darlington.gov.uk/media/22196/air-quality-strategy-2024-2029.pdf

2.2 Progress and Impact of Measures to address Air Quality in Darlington Borough Council

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

The report is well structured, detailed, and provides the information specified in the Guidance. The following comments are designed to help inform future reports:

1. *Comments from last year's ASR have been mentioned and addressed.*
2. *The provided information on local engagement by Darlington Borough Council and the Tees Valley Combined Authority is comprehensive, covering air quality monitoring, clean air campaigns, industrial pollution control, smoke control areas, and garden bonfires. Additionally, the Tees Valley Combined Authority offers details on sustainable travel, including walking and cycling routes, bus and rail journey planning, and electric vehicle information. The Council's Travel Advisors and Active Travel Hub provide advice on greener travel options. To enhance engagement, the information could include more specifics on initiatives, community involvement opportunities, feedback mechanisms, and success stories to inspire and motivate further participation.*
3. *All graphs and maps are well presented and are clear to read. The Council have also provided a detailed discussion of the trends.*
4. *A local Air Quality Strategy is under development to prevent and reduce polluting activities. The AQS needs to be published within the coming year and is expected to be presented in next year's ASR.*
5. *The priorities for Darlington Borough Council include continuing to monitor pollution concentrations to identify trends, ensuring that new developments do not negatively*

impact local air quality, regulating new industrial processes in line with The Environmental Permitting (England and Wales) Regulations 2016, and cooperating with the other Tees Valley Councils to implement measures for improving air quality. Additionally, the Council will focus on identifying sources of fine particles to explore cost-effective local actions for reducing emissions. It is recommended that Darlington Borough Council maintains rigorous monitoring and assessment practices and strengthens regional cooperation to enhance air quality initiatives.

6. *A national bias adjustment factor has been applied and a screenshot of the tool has been included, which is welcomed.*
7. *Overall, the report provides a good insight into the work that the Council are doing to improve local air quality.*

The comments made within the appraisal report, as shown above, have been taken into account for the completion of the 2025 ASR. A case study on Cummins is included in the Executive Summary of the report.

Whilst Darlington Borough Council currently has no requirement to declare an AQMA, the Council is committed to further improving air quality in general and has taken forward a number of measures during the current reporting year of 2024 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.1.

Thirty-three measures are included within Table 2.1, with the type of measure and the progress Darlington Borough Council and partners have made during the reporting year of 2024 presented. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.1. Measures completed over 5 years ago have been removed from this year's table, but feature in earlier versions of the report. The table has also been updated to highlight links between the measures and aims of Darlington's Local Air Quality Strategy 2024-2029.

Darlington Borough Council undertakes local action in co-operation with neighbouring councils through the TVCA, as well as through the Tees Valley Environmental Protection Group (TVEPG), which includes a representative from the Environment Agency. The Council also encourages standalone measures that may have a beneficial impact on air quality.

Key measures during the reporting year are:

- Publication of first Local Air Quality Strategy for Darlington Borough Council

- Publication of first Electric Vehicle Charging Policy for Darlington Borough Council
- Burn Right Campaign (Autumn/Winter 2024-25) – Social media messages, website information, local magazine/press articles, posters in fuel retailers, digital billboard graphics and information sent to Council staff via the Briefing. Promotion of Chimney Fire Safety Week 2024 and Scary Facts Halloween article (October 2024), linking in the importance of burning suitable fuel and maintaining appliances with health effects.
- Continuation of the Care for Clean Air campaign over Autumn/Winter 2024-25. Work with Reid Street Primary School which saw a large campaign banner installed on the school railings. Children also handed out campaign leaflets to parents on the school run and approached anyone sat waiting with their engines running asking them to switch it off. This was picked up by ITV and featured on the regional Tyne Tees news, as well as BBC Radio Tees.
- Darlington station improvements progressing – project led by TVCA and Network Rail and includes work to make the station easier to use for people arriving on foot, by bike and by public transport. The work is to include the installation of a new fully accessible and enclosed footbridge, as well as new cycle lanes, bike shelters and electric car charging points. Construction of new Eastern Concourse building delivered on time and on budget. February 2025 also saw the new enclosed footbridge lifted into place over two new platforms, marking a major milestone in the regeneration project.
- Darlington Borough Council's (DBC's) trial of biofuel (hydrotreated vegetable oil) in half of their household waste wagon fleet still ongoing, to see if it will be a viable alternative in the long term. Now also trialling solar panels on 5 no. refuse vehicles.
- Planning permission was granted in January 2025 for the erection of a substation and additional EV chargers at the Council depot on Allington Way to support the drive towards the uptake of electric vehicles for the DBC operational fleet.
- Teesside Airport which previously became home to a temporary hydrogen refuelling station obtained planning permission for a permanent hydrogen refuelling station in February 2025.
- Major project to record traffic flows and passenger numbers underway to shape how transport projects are developed with data used to inform model to be used by TCVA and local authority in understanding implications of upcoming major transport infrastructure schemes across road and rail networks, including in Darlington.

- Competition engaging with schools across the TVCA with pupils having to submit drawings and name suggestions to feature on the new zero emission bus fleet (ZEBRA scheme). Winners include pupils from schools in Darlington.
- As part of the Enhanced Bus Partnership (with the regions bus operators, local authorities, TVCA and the Confederation of Passenger Transport), Darlington took part in the Kids Go Free scheme in school holidays for the third year in 2024, where up to three children aged 11 or under were able to travel for free all day, every day, throughout the school holidays (when accompanied by an adult with a valid ticket or pass), to help local parents and carers plan exciting and cost-effective days out while encouraging more sustainable transport choices.
- The Active Travel Hub programme, funded by TVCA, continues to operate in Darlington and across the Tees Valley, with further emphasis on local community engagement and public consultation, to support the delivery of Darlington's and TVCA's ambitious vision for the Local Walking and Cycling Infrastructure Plan, with capital funding from Active Travel England (ATE).
- Continuation of the Wheels to Work Scheme - The project will help people who do not have access to a car or bike, or who cannot make the journey by bus or train, to get to their job or college. This Tees Valley scheme will hire an electric motorbike, or electric bicycle, to eligible individuals. It will also provide the necessary safety equipment and training.
- A Licensing Policy which offers a 25% reduction in licensing fees for vehicles that are fuelled by liquid petroleum gas (LPG), electric, petrol-electric and compressed natural gas (NGV). Darlington Borough Council's latest taxi licensing policy which was implemented from 1 January 2021 introduced a requirement for all vehicles to be Euro 6 compliant or emission free by 1 April 2023 (with wheelchair accessible vehicles being exempt from this requirement). Euro 6 introduced a further, significant reduction in NOx emissions from diesel engines and established similar standards for petrol and diesel vehicles. All 254 taxis meet this requirement, the only exception being wheelchair accessible vehicles which have been allowed to remain due to shortages in this type of vehicle (currently 9 of these). There are 6 electric vehicles and 76 hybrid vehicles. The taxi licensing policy (and commitment to tougher emission standards) also mentions consideration of longer-term plans aimed at promoting 'cleaner' vehicles, expanding the electric charging infrastructure to encourage uptake of electric vehicles amongst the taxi trade, as well as educational interventions (particularly around vehicle idling at taxi ranks).

Darlington Borough Council worked to implement these measures in partnership with the following stakeholders during 2024:

- TVCA;
- TVEPG;
- Tees Valley bus service operators;
- Local developers.

Darlington Borough Council anticipates that the measures stated above and in Table 2.1 will help maintain compliance with the AQ objectives across the borough.

A number of the schemes do not all address air quality directly, but all will have a bearing on improving air quality. Darlington Borough Council's Public Health team support the work done in relation to air quality and will continue to work alongside Environmental Health and other colleagues across the Council.

Table 2.1 – Progress on Measures to Improve Air Quality

Measure No.	Measure Title	Category	Classification	Year Measure Introduced	Estimated / Actual Completion Year	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	Related Local Air Quality Strategy Aims
1	Publication of Darlington Borough Council's first Local Air Quality Strategy	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2024		Darlington Borough Council - Environmental Health		Not Funded	< £10k	Completed	To ensure air quality remains a high-profile issue	None	Gained coverage in local media, on local radio station and Air Quality Strategy aims linked to measures reported in this table.		
2	Publication of Darlington Borough Council's first Electric Vehicle Charging Policy	Policy Guidance and Development Control	Other Policy	2025		Darlington Borough Council - Highways		Not Funded	< £10k	Completed	To enable and support increased uptake of electric vehicles	None			Aim 1. Reduce emissions and protect public health
3	A refuelling station serving hydrogen-powered vehicles based in the Tees Valley at Teesside International Airport. Tees Valley Hydrogen Transport Hub, the airport, along with other key organisations, is testing zero emission, hydrogen-fuelled commercial and support vehicles	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2020	2025	Tees Valley Combined Authority and Tees Valley Local Authorities	Department for Transport and Innovate UK - Hydrogen Transport Hub Demonstration (Tees Valley)	Funded	£1 million - £10 million	Implementation	To provide the infrastructure for use of hydrogen vehicles	None	One temporary hydrogen refuelling station is already operational. Planning permission granted in February 2025 for a new permanent hydrogen refuelling station. Construction underway, to be followed by installation and commissioning works.	The Tees Valley is aiming to be home to the UK's first Hydrogen Transport Hub.	Aim 1. Reduce emissions and protect public health
4	Woodburning campaign - Burn Right (Appendix F)	Public Information	Via other mechanisms	2023		Darlington Borough Council - Environmental Health	LA and DEFRA (Air Quality New Burdens Determination (2022/23) 31/6620	Funded	< £10k	Implementation	To raise awareness of smoke control area requirements and burning suitable fuel	No. of hits/ statistics on social media/website No. of complaints about smoke from domestic chimneys	Social media messages, news articles, information sheet/website updates, posters at fuel retailers, graphic on digital billboard. Promotion of Chimney Fire Safety Week September 2024. 'Scary fact's' woodburning Halloween article October 2024.	No. of complaints about smoke from domestic chimneys has gone down from 47 in 2023-24 to 19 in 2024-25, 60% decrease considered to be influenced by educational work.	Aim 2. Raise awareness and influence change
5	Idling campaign schools - Care for Clean Air (Appendix F)	Public Information	Via other mechanisms	2023		Darlington Borough Council - Environmental Health		Not Funded	< £10k	Implementation	To reduce idling and emissions of Nox, PM10 and PM2.5	No. of hits/ statistics on social media/website	Social media messages, press releases, website updates, information provided to schools, lamppost signs, banners. Lamppost signs recirculated around schools during over winter 2024/25. Work with primary school children to target vehicles idling on school run, school Wakelet and story featured on local TV news and radio. Drone news article 'We love clean air'		Aim 2. Raise awareness and influence change

Measure No.	Measure Title	Category	Classification	Year Measure Introduced	Estimated / Actual Completion Year	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	Related Local Air Quality Strategy Aims
6	Darlington Railway Station improvements	Transport Planning and Infrastructure	Public transport improvements - interchanges stations and services	2023	2025	Tees Valley Combined Authority, Darlington Borough Council, Network Rail, London North Eastern Railway	Tees Valley Combined Authority & Central Government	Funded	> £10 million	Implementation	To encourage more sustainable travel choices	None	New Eastern Concourse building completed, and new footbridge installed. Multi-storey car park constructed. Work still expected to be completed in 2025.	Work is to include new cycle lanes, bike shelters and electric car charging points.	Aim 5 Consider the impact of development on air quality
7	Tees Valley Bus Service Improvement Plan (BSIP). Zero Emission Bus Regional Areas 2 (ZEBRA2) Scheme - hydrogen bus trial	Policy Guidance and Development Control	Low Emissions Strategy	2022	2027	Tees Valley Combined Authority, Local Authorities and operators of bus services	ZEBRA(2)	Funded	> £10 million	Implementation	To encourage the use of low emission vehicles	None	Arriva will run a number of single decker ZEBs on service 2 out of their Darlington depot. 8 chargers will also be installed at their Darlington depot. Competition engaging with schools across the TVCA with pupils having to submit drawings and name suggestions to feature on the new zero emission bus fleet. Winners include pupils from schools in Darlington.	Tees Valley aims to be one of the first regions in the UK to have an entirely zero emission local bus fleet.	Aim 1. Reduce emissions and protect public health
8	Tees Valley Bus Service Improvement Plan. Bus partnership working	Promoting Low Emission Transport	Other	2022		Tees Valley Combined Authority, Local Authorities and operators of bus services	Department for Transport - BSIP	Funded	> £10 million	Implementation	To encourage use of sustainable transport & low emission vehicles	None	An Enhanced Bus Partnership has been created to deliver improvements to bus services across themes of ensuring a sustainable network for the future, bus priority improvements, improved fare offers (Kids Go Free), enhanced customer experience and decarbonising the bus fleet. TVCA received confirmation of £1.5million BSIP+ funding for 2023/24.	Ongoing work	Aim 2. Raise awareness and influence change
9	Urban Traffic Management Control (UTMC) - Traffic signalling and use of smart technology including air quality monitors	Traffic Management	UTC, Congestion management, traffic reduction	2019	2027	Tees Valley Combined Authority and Local Authorities	City Regional Sustainable Transport Settlements (CRSTS)	Funded	£1 million - £10 million	Planning	Smart technology to prevent and control traffic congestion	None	TVCA are currently exploring options for upgrades to the UTMC system to all for improvements to bus priority, which will be applied to signalised junctions/crossings on priority bus corridors.		Aim 1. Reduce emissions and protect public health

Measure No.	Measure Title	Category	Classification	Year Measure Introduced	Estimated / Actual Completion Year	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	Related Local Air Quality Strategy Aims
10	Electric Vehicle Charging Points (EVCP) to be installed in six town centre Council car parks. The new charging points will be in Abbott's Yard, Winston Street North, Commercial Street West, Park Place East, Park Place West and Kendrew Street West	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2022	2023	Tees Valley Combined Authority and Local Authorities	Tees Valley Combined Authority following receiving £720,000 from Government's Office for Zero Emission Vehicles	Funded	£500k - £1 million	Completed	Promote the use of and provide infrastructure for electric vehicles	No. of charge points	Funding to deliver chargers in 32 public car parks across the Tees Valley. Electric charging points already installed at Feethams Multi Storey Car Park on Beaumont Street and at East Street Car Park. Further EVCP's installed at Commercial Street West 4 x 11kW Kendrew St West 4 x 11kW Park Place East 6 x 11kW Park Place West 4 x 11kW Winston Street 5 x 11kW Abbott's Yard 1 x 50kW	Each EVCP represents 2 charging points	Aim 2. Raise awareness and influence change & Aim 3. Lead by example
11	Electric Vehicle Charging Infrastructure Project On street Electric Vehicle charging	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2023		Tees Valley Combined Authority and Local Authorities	Local Electric Vehicle Infrastructure (LEVI) fund	Funded	£1 million - £10 million	Implementation	Promote the use of and provide infrastructure for electric vehicles	None	Tees Valley wide strategy for on street charging led by TVCA has been finalised.		Aim 2. Raise awareness and influence change
12	DBC Fleet Management and Electric Vehicles	Vehicle Fleet Efficiency	Fleet efficiency and recognition schemes			Darlington Borough Council		Not Funded		Implementation	Reduce vehicle emissions	No. of low emission vehicles in Council fleet	The Council has an electric fleet of vehicles currently consisting of (17 Building Services, 3 Highways, 2 Building Cleaning, 2 Street Scene, 1 Cemeteries, 1 Pest Control, 1 South Park Gardener, 1 Library Service) Trial of HVO fuel in some refuse vehicles ongoing, as well as a more recent trial which has seen solar panels installed on 5 refuse vehicles. Planning permission was granted in January 2025 for the erection of a substation and the installation of additional EV charging points at the Council depot on Allington Way (14 x 7kwh, 50 x 22kwh, 6 x 50kwh).		Aim 3. Lead by example
13	Tees Valley Local Cycling and Walking Infrastructure Programme (LCWIP)	Transport Planning and Infrastructure	Cycle network	2020		Tees Valley Combined Authority and Local Authorities	City Regional Sustainable Transport Settlements (CRSTS)	Funded	£1 million - £10 million	Implementation	Promotion of alternative forms of transport and reduce vehicle use	None	LCWIP identified a number of routes within Darlington.	See item 17 also	Aim 2. Raise awareness and

Measure No.	Measure Title	Category	Classification	Year Measure Introduced	Estimated / Actual Completion Year	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	Related Local Air Quality Strategy Aims
							Active Travel Fund (ATF2/3/4E) Levelling Up Fund						Public engagement relating to: Darlington Eastern Connectivity (Town Centre to Morton Park onward to Teesside Airport), Darlington Western Connectivity (Town Centre to Faverdale via Cockerton), Darlington Town Centre Connectivity		influence change
14	Recording of traffic flows and passenger numbers to shape development of major transport projects, including Darlington Relief Road.	Transport Planning and Infrastructure	Other	2024		Tees Valley Combined Authority and Local Authorities		Not Funded		Planning	To understand implications of upcoming major transport infrastructure schemes across road and rail networks	None	Automatic traffic counts, manual traffic counts and car park surveys.		Aim 5 Consider the impact of development on air quality
15	Improvements to the Stockton and Darlington Railway (S&DR) track bed to ensure this key pedestrian and cycle route is accessible all year round linking the village of Middleton St George to key employment sites to the east of Darlington	Transport Planning and Infrastructure	Cycle network	2020	2025	Darlington Borough Council - Sustainable Transport & Highways	Various	Partially Funded	£1 million - £10 million	Implementation	To encourage cycling and walking within the Borough	None	Alignment of Stockton and Darlington Railway Walking and Cycling route as a continuous public right of way through the Borough, as close to the original alignment as possible. Covers 26-mile route from Durham to Stockton via Darlington.	Funding is a barrier to implementation	Aim 2. Raise awareness and influence change
16	Shared use path along the spine road at the new Amazon development on Morton Park Way and the funding of additional bus services	Transport Planning and Infrastructure	Cycle network	2018	2021	Developer	S106 Obligation	Funded	£1 million - £10 million	Completed	To encourage cycling and walking within the Borough	None	S106 bus subsidy funding has been utilised to provide a subsidised bus service (Arriva service 2A) connecting Amazon to the town centre. A segregated path was constructed in 2020.		Aim 2. Raise awareness and influence change
17	New cycling and walking route on Woodland Road, Outram Street and Duke Street	Transport Planning and Infrastructure	Cycle network	2020	2027	Darlington Borough Council - Sustainable Transport & Highways	Tees Valley Mayor and Tees valley Combined Authority / Department for Transport	Funded	£1 million - £10 million	Implementation	To encourage cycling and walking within the Borough	None	The first phase from Darlington Memorial Hospital to Town Centre completed October 2022. Work on Outram Street and Duke Street completed 2023. Phase 2 from the Hollyhurst junction on Woodland Road to Deneside Road via the Tennis Dene is yet to be completed.	Works to create a new route between West Park and the Town Centre.	Aim 2. Raise awareness and influence change

Measure No.	Measure Title	Category	Classification	Year Measure Introduced	Estimated / Actual Completion Year	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	Related Local Air Quality Strategy Aims
18	Darlington Borough Council's Local Plan 2016 -2036 adopted February 2022. Policy IN 4 requires every new residential property which has a garage or dedicated marked out residential car parking space within its curtilage should include an electric socket suitable for charging electric vehicles. Non-residential development creating over 50 parking spaces are required to provide at least one double electric vehicle charging point (2 spaces). For each additional 50 parking spaces at least one double charging point will be required	Policy Guidance and Development Control	Other policy	2016		Darlington Borough Council	N/A	Not Funded		Implementation	To provide the infrastructure for use of electric vehicles	None			Aim 5. Consider the impact of development on air quality
19	Darlington Borough Council's Local Plan 2016 -2036 adopted February 2022. Policy IN 3 requires the preparation and implementation of Travel Plans, Transport Assessments and other schemes and agreements, for any development proposals that have potential significant impacts (generation of significant additional journeys)	Policy Guidance and Development Control	Other policy	2016		Darlington Borough Council	N/A	Not Funded		Implementation	To promote the use of sustainable transport for journeys to work, training and education	None	Travel Plan Guidance update 2024		Aim 5. Consider the impact of development on air quality
20	Licensing requirement (taxis) for all vehicles to be Euro 6 compliant by 1 April 2023	Policy Guidance and Development Control	Other policy	2021	2024	Darlington Borough Council - Licensing Section	N/A	Not Funded		Completed	To ensure the use of vehicles that produce lower emissions	% of compliant vehicles	All taxi fleet in Darlington is Euro 6 compliant (currently 245 vehicles, including 6 electric and 76 hybrid).	Wheelchair accessible vehicles exempt from requirement (currently 9). Issue with other local authority vehicles coming into the Borough that don't meet the Euro 6 standard.	Aim 1. Reduce emissions and protect public health
21	Licensing policy offers 25% reduction in licensing fees for vehicles that are fuelled by liquid petroleum gas, electric, hybrid and compressed natural gas	Policy Guidance and Development Control	Other policy	2021		Darlington Borough Council - Licensing Section	N/A	Not Funded		Completed	To encourage the use of low emission vehicles	None			Aim 1. Reduce emissions and protect public health
22	Idling campaign hackney taxi drivers	Public Information	Via leaflets	2022	2022	Darlington Borough Council - Environmental Health & Licensing Section		Not Funded	< £10k	Completed	To reduce idling	None	Leaflet distributed to hackney taxi drivers on idling of engines		Aim 2. Raise awareness and influence change

Measure No.	Measure Title	Category	Classification	Year Measure Introduced	Estimated / Actual Completion Year	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	Related Local Air Quality Strategy Aims
23	Compliance checks – the Air Quality (Domestic Solid Fuels Standards) (England) Regulations 2020	Public Information	Via other mechanisms	2022		Darlington Borough Council - Environmental Health		Not Funded	< £10k	Implementation	To ensure compliance with legislation	No. of retailers/suppliers contacted	Visits to 43 retailers selling fuels and letters sent to a further 75. Further work still proposed including to make contact with stove suppliers within DBC area.		Aim 6. Ensure compliance with legislation
24	Safer Routes to School Programme	Traffic Management	Other	2022		Darlington Borough Council - Sustainable Transport & Highways	City Regional Sustainable Transport Settlements (CRSTS) Highway Allocation	Funded	£500k - £1 million	Implementation	To ensure a safer more convenient highway network around schools and encourage sustainable travel choices	None	Work on various schemes have progressed. Mount Pleasant Primary School and Hurworth Primary School – complete. Abbey Schools (Abbey Road & Cleveland Terrace) – consultation complete. Delivery expected in 2025/26 school holidays. St Bede's consultation June 2024. St Augustine's – initial consultation led to scheme changes, reconsulted in October 2024.	Schemes supported by a programme of education, information and publicity to inform residents of the travel choices available to them and their impact on the environment.	Aim 2. Raise awareness and influence change
25	Wheels to Work Scheme - aims to help people who do not have access to a car or bike, or who cannot make the journey by bus or train, to get to their job or college by hiring an electric motorbike or bicycle	Transport Planning and Infrastructure	Public cycle hire scheme	2021	2024	Tees Valley Combined Authority and Local Authorities	Tees Valley Combined Authority	Funded	£500k - £1 million	Implementation	To enable access to employment and training by sustainable modes of transport	None	TVCA has allocated £840,000 over a three-year period to deliver the scheme and acquire a fleet of e-motorbikes to transition to an all-electric fleet.		Aim 2. Raise awareness and influence change
26	A68 Cockerton and Woodland Road/Carmel Road North roundabouts improvement scheme	Traffic Management	Other	2022		Darlington Borough Council – Sustainable Transport & Highways		Not Funded		Planning	To improve traffic flow/ease congestion and improve walking and cycling routes in the area	None	Proposed formation of 2 no. conventional roundabouts and construction of cycle paths and walkways.		Aim 1. Reduce emissions and protect public health
27	Darlington Borough Council's Local Plan 2016 -2036 adopted February 2022. Policy DC3 Health and Wellbeing requires in the case of development of 150 or more homes and all other non-residential 'major' development, the submission of a Health Impact Assessment as part of the application	Policy Guidance and Development Control	Other policy	2016		Darlington Borough Council	N/A	Not Funded		Implementation	To explain how health considerations (including air quality) have informed the design	None	A Development Guidance Note and Comprehensive Health Impact Assessment tool has been produced.		Aim 5. Consider the impact of development on air quality
28	Promotion of Clean Air Day (15 June 2023)	Public Information	Via other mechanisms	2023	2023	Darlington Borough Council - Environmental Health		Not Funded	< £10k	Completed	Promotion of alternative forms of transport and reduce vehicle use	None	Council news article encouraging more sustainable travel choices.		Aim 2. Raise awareness and influence change
29	Tees Flex on-demand bus service	Alternatives to private vehicle use	Other	2020	2026	Tees Valley Combined	Tees Valley Mayor and Tees Valley	Funded	£1 million - £10 million	Implementation	Promotion of alternative forms of	None	Demand Responsive Transport solution. On-demand bus sharing	Three-year pilot launched in 2020, extended until 2026.	Aim 2. Raise awareness

Measure No.	Measure Title	Category	Classification	Year Measure Introduced	Estimated / Actual Completion Year	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	Related Local Air Quality Strategy Aims
						Authority and Local Authorities	Combined Authority				transport and reduce vehicle use		service covering Darlington.		and influence change
30	Introduction of garden waste collection service and discouraging garden bonfires	Public Information	Via other mechanisms	2019		Darlington Borough Council – Waste department		Not Funded		Implementation	To reduce emissions from garden bonfires	No. of subscribers	Increase in uptake of garden waste collection service each year since introduction up to 2023. Reduction in complaint numbers about garden bonfires since 2020.		Aim 1. Reduce emissions and protect public health
31	Promotion of Clean Air Day (20 June 2024)	Public Information	Via other mechanisms	2024	2024	Darlington Borough Council - Environmental Health		Not Funded	< £10k	Completed	Promotion of alternative forms of transport and reduce vehicle use	None	Social media post using Global Action Plan graphics.		Aim 2. Raise awareness and influence change
32	Updates to Council air quality/environmental health webpages	Public Information	Via other mechanisms	2024	2024	Darlington Borough Council - Environmental Health		Not Funded	< £10k	Completed	To provide information on air quality matters	None	Website includes information on the following: air quality strategy, latest ASR, campaign work, air quality news, smoke control areas, garden bonfires and environmental permitting.		Aim 2. Raise awareness and influence change
33	Installations covered by environmental permits covering air quality	Environmental Permits	Other			Darlington Borough Council - Environmental Health		Not Funded	< £10k	Implementation	To ensure compliance with legislation	Compliance with permit conditions, risk assessment scoring	Currently 29 no. permitted installations in Darlington		Aim 6. Ensure compliance with legislation

* N.B. Key performance indicators are not defined Council key performance indicators but detail how the success of the measures can be presented and reviewed where possible.

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

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy[1], local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter ($PM_{2.5}$). There is clear evidence that $PM_{2.5}$ (particulate matter smaller than 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Overview

$PM_{2.5}$ are very fine particulates which are now considered to be a more significant health risk than the larger particulates PM_{10}, as they penetrate further into the respiratory system and are less easily dislodged. Recognising this, the UK Public Health Outcomes Framework includes an indicator relating to fine particulate matter ($PM_{2.5}$). In May 2022 the definition and method of calculating the indicator D01 'Fraction of mortality attributable to particulate air pollution' was revised. The latest factors nationally and for the Tees Valley (2019, 2020, 2021, 2022 and 2023 (new method)) are as follows:

Fraction (%)	England	North East	Darlington	Hartlepool	Middlesbrough	Redcar & Cleveland	Stockton-on-Tees
2019	7.1	4.9	5.1	5.4	6.0	5.7	5.6
2020	5.6	4.0	4.1	4.1	4.4	4.0	4.2
2021	5.5	4.8	4.6	4.5	5.2	4.4	4.9
2022	5.8	5.4	5.2	5.1	5.9	4.9	5.5
2023	5.2	4.6	4.4	4.4	4.9	4.3	4.6

$PM_{2.5}$ is not currently part of the LAQM framework within England and as such there is no statutory requirement on local authorities to review and assess $PM_{2.5}$ for LAQM purposes. However, the Environment Act 2021 established a legally binding duty on Government to set (by 31st October 2022) an annual mean target on the level of $PM_{2.5}$, in addition to a longer-term target. The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 set the two $PM_{2.5}$ targets into law and contain provisions on how they will be monitored and assessed. The legally binding targets are as follows, each with an interim target (not legally binding):

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

- Annual mean concentration of $PM_{2.5}$ in ambient air is equal to or less than 10 micrograms per cubic metre (µg/m³) by 31st December 2040, with an interim target of 12µg/m³ by January 2028.
- 35% reduction in population exposure to $PM_{2.5}$ by 31st December 2040 (as compared with a baseline period of 1st January 2016 to 31st December 2018), with interim target of 22% reduction by January 2028.

While the responsibility for meeting these targets sits with national government, local authorities have a role to play in delivering reductions in $PM_{2.5}$ at a more local level and the government still expects all local authorities to effectively use their powers to reduce $PM_{2.5}$ emissions from the sources which are within their control.

There is not currently any monitoring of $PM_{2.5}$ or PM_{10} completed within the borough, therefore no concentration values can be reported or estimated using the method as described in Box 7.7 of LAQM.TG(22), which provides a method for estimating $PM_{2.5}$ concentrations from PM_{10} measurements. However, a site in Darlington has been confirmed for an air quality monitoring station as part of the Automatic Urban and Rural Network (AURN) as part of a new and emerging network to monitor concentrations of $PM_{2.5}$ set against the needs of The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023.

Within the Tees Valley, there are three $PM_{2.5}$ monitors as part of the national network, Middlesbrough Breckon Hill (urban background); Stockton Eaglescliffe (urban background); and Stockton A1035 Nelson Terrace (roadside), all giving direct $PM_{2.5}$ annual means. These sites are located approximately 22km, 12 km and 15.5 km from Darlington, respectively. The Breckon Hill and Eaglescliffe stations have PM_{10} monitors alongside them so that a locally derived factor of $PM_{2.5}$ to PM_{10} can be calculated and compared with the national factor and used at local PM_{10} monitors with a similar location.

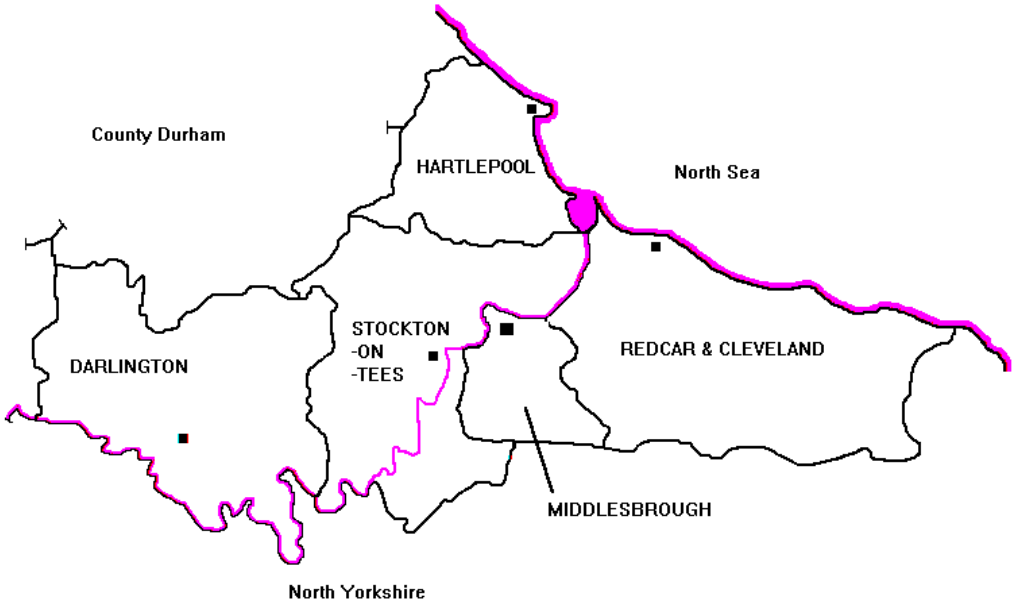
Annual means for $PM_{2.5}$ within the Tees Valley (Middlesbrough Breckon Hill and Stockton Eaglescliffe, Stockton A1305 Nelson Terrace) for the last five years (2020 – 2024) have ranged between 6.7 and 8.6µg/m³, with variations year on year likely to be due to weather variations. The levels indicate that the annual mean concentration target (and interim target) is already being met at these locations.

Technical Guidance recognises that due to its extremely small size, $PM_{2.5}$ can travel for long distances in the air and it is estimated that as much as 40% to 50% of the levels found in any given area can be from sources outside a local authority's direct boundary. Around half of

concentrations are thought to be secondary sourced, i.e., reactions between other pollutants in the atmosphere. In addition, coastal and rural areas can have higher proportions of natural sources such as salt, fine sand and pollens, the extent of which will be weather dependent. This means that locally emitted $PM_{2.5}$ will tend to be significantly less than 50% of the total burden, with road traffic, industry and domestic solid fuel burning (wood and coal) being the principal sources.

Darlington $PM_{2.5}$

Darlington Borough Council is one of five unitary Councils forming the general area known as the Tees Valley. As shown below, it is the most westerly of these Councils and third largest in area, at 198.4 km^2.



Darlington Borough has a densely populated central area but is otherwise largely rural. It is a major shopping and commercial centre and is the main railway centre for the Tees Valley. There is very little heavy industry compared with other Tees Valley Councils, and although some quarrying and other industrial processes lie just outside its boundary, they do not significantly impact on Darlington air quality.

The main A1 motorway (North – South), and the A66 trunk route (East – West) run through the Borough, but are mainly in rural areas, with no areas of relevant exposure. Within the urban area, there are some congested commuter routes, and in the absence of a northern by-pass, some heavy through traffic on the northern outskirts of the town.

The majority of the Darlington urban area is within a smoke control area, subject to Smoke Control Orders, and natural gas is the main source of heating in all but a few rural villages.

As highlighted in last year's 2024 ASR, the Council launched the 'Burn Right' campaign in Autumn 2023 which aims to remind and educate people on smoke control area requirements in Darlington and the importance of burning suitable fuels. Work was also carried out in 2022/23 to carry out visits and write to retailers to check compliance with the Air Quality (Domestic Solid Fuels Standards) (England) Regulations 2020, relating to the sale/certification of domestic solid fuels. The 'Burn Right' campaign was relaunched again over Autumn Winter 2024/25 and involved graphics being displayed on a digital billboard close to a roundabout in the Town Centre, posters being displayed in fuel retailers, information being sent to Councillors for inclusion in ward newsletters etc, a message in the staff briefing, social media posts, promotion of Chimney Fire Safety Week 2024, a 'Scary Facts' Council news article in the run up to Halloween and an article in the One Darlington magazine.

The Environment Act 2021 from the 1st May 2022 enabled local authorities including Darlington Borough Council to start issuing financial penalties for a chimney releasing smoke in a smoke control area. While no financial penalties have been issued, 28 no. warnings have been issued since the introduction of these new powers until the end of 2024. Grant funding has been allocated to Darlington Borough Council for the new burdens associated with the enforcement and management of Smoke Control Areas, as introduced by the Environment Act 2021.

The principal source of fine particulate pollution in Darlington is still likely to be from road transport, but even this is limited. Other than along the main commuter routes into the town centre, road traffic is generally light as the significant through routes are in their own transport corridors. This general view of sources is reflected in the national 1 km^2 sector model background maps for Darlington, produced by Defra and the Devolved Administrations, based on 2021 emission source estimates. Typical background levels ($PM_{2.5}$) are shown as 4.5 – 7.5µg/m^3 per km^2. The average $PM_{2.5}$ loading per km^2 in 2021 is shown as 5.1µg/m^3, which is projected to reduce to 4.2µg/m^3 in 2040.

The levels already show compliance with the new annual mean target; however Darlington Borough Council are not complacent in aiming to reduce $PM_{2.5}$ levels further over the coming years.

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

This section sets out the monitoring undertaken within 2024 by Darlington Borough 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

Darlington Borough Council did not undertake any automatic (continuous) monitoring during 2024.

3.1.2 Non-Automatic Monitoring Sites

Darlington Borough Council undertook non-automatic (i.e., passive) monitoring of NO_2 at 16 sites during 2024. Table A.1 in Appendix A presents the details of the non-automatic sites.

A map showing the location of the monitoring sites is 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.

3.1.3 Nitrogen Dioxide (NO_2)

Table A.2 and Figure A.1 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.

All monitoring locations within Darlington continue to report annual mean NO_2 concentrations well below the AQ objective. Fall-off with distance correction was not required due to the low monitored concentrations (less than 36µg/m³). Following bias adjustment and annualisation where required, the maximum reported concentration in 2024 is 29.0µg/m^3 at diffusion tube monitoring location D1, located along the A167 near Northgate roundabout in Darlington. This monitoring location has reported the maximum concentration in 2020 (30.0µg/m^3), 2021 (32.1µg/m^3), 2022 (30.2µg/m^3) and 2023 (28.6 µg/m^3).

Figure A.1 presents the 2024 annual mean NO_2 concentrations at Darlington Borough Council's monitoring sites. Concentrations at six sites decreased slightly during 2024 in comparison to 2023. Concentrations at two sites stayed the same and the other six sites increased slightly during 2024 in comparison to 2023 (excludes two new sites as no data for previous years for comparison).

It is possible to infer the risk of exceedances of the 1-hour mean NO_2 AQ objective at diffusion tube monitoring sites. LAQM.TG(22) provides an empirical relationship that states exceedances of the 1-hour objective are unlikely when the annual mean concentration is below 60µg/m^3. Given that the highest recorded annual mean concentration at any of the diffusion tube monitoring sites in 2024 is 29.0 µg/m^3, it is possible to conclude that there have been no exceedances of the hourly mean NO_2 objective. Results over the last five years at all monitoring locations have been below 60µg/m³.

Appendix A: Monitoring Results

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

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
D1	Northgate	Kerbside	429026	514898	NO_2	No	N/A	1.0	No	2.5
D2	Haughton Road	Roadside	429351	514819	NO_2	No	1.7	2.3	No	2.5
D3	Platform 1 (Middleton St George)	Roadside	434205	514165	NO_2	No	4.6	1.5	No	2.5
D4	Salters Lane	Roadside	429478	517375	NO_2	No	3.0	5.5	No	2.2
D5	Woodland Rd	Roadside	428152	514966	NO_2	No	20.0	1.6	No	2.6
D6	Blackwell Bridge	Roadside	427734	512591	NO_2	No	10.0	2.0	No	2.3
D7	North Road	Roadside	429016	515546	NO_2	No	4.0	1.5	No	2.3
D8	Haughton Green	Kerbside	430905	515918	NO_2	No	19.0	0.6	No	2.4
D9	Yarm Road / McMullen Rd	Roadside	431299	514137	NO_2	No	9.0	2.0	No	2.4
D10	St Cuthbert's	Kerbside	429170	514534	NO_2	No	N/A	0.8	No	2.4
D11	Whinfield Road	Roadside	430723	516737	NO_2	No	19.0	1.4	No	2.3

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
D12	106 High Northgate	Kerbside	429028	515523	NO_2	No	2.7	0.4	No	2.4
D13	Eldon Street Corner	Kerbside	429183	516223	NO_2	No	8.5	0.6	No	2.5
D14	West Auckland Road	Roadside	427201	516597	NO_2	No	11.0	1.8	No	2.4
D15	Haughton Road/The Sidings	Roadside	429732	515177	NO_2	No	17.5	2.9	No	2.2
D16	Cockerton Green	Roadside	427290	515475	NO_2	No	15.3	2.6	No	2.3

Notes:

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

(2) N/A if not applicable.

Table A.2 – Annual Mean 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
D1	429026	514898	Kerbside	100.0	100.0	30.0	32.1	30.2	28.6	29.0
D2	429351	514819	Roadside	75.0	75.0	21.5	22.5	22.4	21.4	23.9
D3	434205	514165	Roadside	100.0	100.0	11.1	10.1	10.9	11.2	11.2
D4	429478	517375	Roadside	83.0	83.0	26.0	23.5	22.2	21.5	18.7
D5	428152	514966	Roadside	100.0	100.0	16.9	19.7	17.8	16.3	16.7
D6	427734	512591	Roadside	100.0	100.0	26.0	26.8	25.2	24.8	24.8
D7	429016	515546	Roadside	81.1	81.1	28.3	28.8	27.7	27.6	26.1
D8	430905	515918	Kerbside	100.0	100.0	26.3	26.4	26.4	26.0	25.1
D9	431299	514137	Roadside	83.0	83.0	19.9	21.6	19.7	19.1	18.4
D10	429170	514534	Kerbside	100.0	100.0	27.4	26.1	25.1	24.8	25.2
D11	430723	516737	Roadside	58.5	58.5	18.9	20.4	18.5	16.3	20.4
D12	429028	515523	Kerbside	75.0	75.0	23.2	25.5	23.1	23.5	23.8
D13	429183	516223	Kerbside	100.0	100.0	19.0	21.1	20.1	20.3	20.0

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
D14	427201	516597	Roadside	100.0	100.0	15.6	15.8	15.4	14.1	14.0
D15	429732	515177	Roadside	75.0	75.0	-	-	-	-	21.1
D16	427290	515475	Roadside	100.0	100.0	-	-	-	-	12.8

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

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

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

Notes:

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

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

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

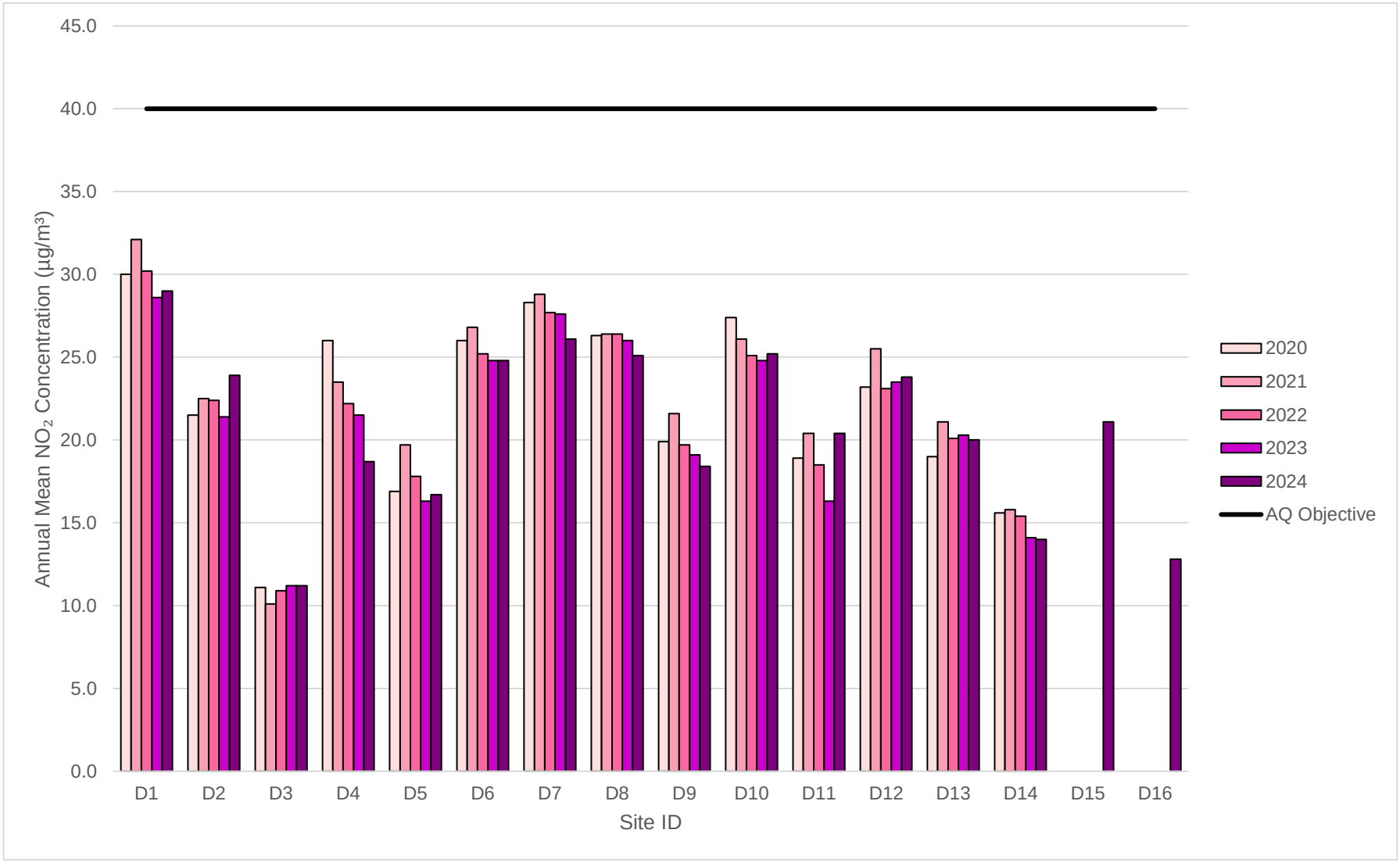
Means for diffusion tubes have been corrected for bias. All means have been "annualised" as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

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

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

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

Figure A.1 – Trends in Annual Mean NO_2 Concentrations



Appendix B: Full Monthly Diffusion Tube Results for 2024

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

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Easting)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.88)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
D1	429026	514898	34.5	37.9	34.8	29.6	32.4	26.0	28.6	26.1	34.8	36.1	**41.7**	33.1	32.9	29.0	-	
D2	429351	514819	30.7		28.7		24.5		24.7	21.2	26.9	29.8	33.3	25.0	27.2	23.9	-	
D3	434205	514165	25.0	15.3	12.4	10.1	10.6	7.3	9.1	6.7	11.2	15.9	16.7	13.1	12.8	11.2	-	
D4	429478	517375	30.0			17.2	19.1	18.8	17.1	15.3	17.7	25.5	28.1	23.1	21.2	18.7	-	
D5	428152	514966	26.9	25.5	19.2	13.3	14.2	12.7	13.8	12.5	13.5	23.7	29.8	23.4	19.0	16.7	-	
D6	427734	512591	29.7	32.1	28.7	22.6	27.0	29.6	26.6	21.6	28.4	31.0	36.5	24.5	28.2	24.8	-	
D7	429016	515546	**42.3**	33.1	27.0	26.0	27.3	22.6	23.8	26.3	27.2		**41.2**		29.7	26.1	-	
D8	430905	515918	35.2	32.8	27.6	22.7	24.6	24.0	25.0	24.2	29.2	34.2	34.1	28.4	28.5	25.1	-	
D9	431299	514137	15.3	24.0	23.8	17.7			18.0	16.1	16.9	23.0	32.6	21.1	20.9	18.4	-	
D10	429170	514534	31.1	33.2	31.1	27.9	29.6	21.7	25.2	22.8	30.6	27.3	35.9	26.5	28.6	25.2	-	
D11	430723	516737						14.5	21.3	13.8	26.8	26.1	34.8	22.1	22.8	20.4	-	
D12	429028	515523	29.1		29.5	26.1			23.4	18.5	30.6	30.5	32.4	23.6	27.1	23.8	-	
D13	429183	516223	27.1	30.1	25.5	19.1	19.2	14.4	17.9	20.1	18.9	30.2	29.9	20.4	22.7	20.0	-	
D14	427201	516597	20.6	17.3	17.1	10.4	13.9	12.7	12.9	12.6	11.1	21.1	24.2	17.3	16.0	14.0	-	
D15	429732	515177	27.6	27.6	23.9	20.2	21.2		17.6	17.9		26.6	32.9		23.9	21.1	-	
D16	427290	515475	9.8	19.7	16.2	13.3	13.7	8.1	11.2	6.4	14.5	19.5	24.9	17.8	14.6	12.8	-	

☒ **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.**

☒ **Darlington Borough Council confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.**

Notes:

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

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

See Appendix C for details on bias adjustment and annualisation.

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

New or Changed Sources Identified Within Darlington Borough Council During 2024

Darlington Borough Council has not identified any new sources relating to air quality within the reporting year of 2024.

To ensure that any new development would not adversely impact upon air quality within the borough, an air quality assessment/screening assessment was received for the following planning application that was granted permission in 2024:

- 23/01180/FUL. CEPAC Branded Packaging, Faverdale. Installation of an internal boiler with a new external flue stack to roof and 4 no. heat relief grilles to the east elevation.

Certain developments also require submission of a Dust Assessment Report, through the planning process to assess any local air quality impacts associated with the construction works themselves and to ensure mitigation measures are incorporated as appropriate.

Additional Air Quality Works Undertaken by Darlington Borough Council During 2024

Whilst Darlington Borough Council does not currently have any declared AQMAs, work will continue in conjunction with neighbouring councils, through the TVCA, to implement local actions (as set out in Table 2.1) to reduce the impact of vehicle emissions within the borough.

QA/QC of Diffusion Tube Monitoring

The diffusion tubes for the year 2024 were supplied and analysed by Gradko International Ltd, the tubes were prepared using the 50% TEA in acetone preparation method.

Gradko is a UKAS accredited laboratory and participates in the AIR-PT Scheme for NO_2 tube analysis and the Annual Field Inter-Comparison Exercise. These provide strict performance criteria for participating laboratories to meet, thereby ensuring NO_2 concentrations reported are of a high calibre. The latest available AIR-PT result is AIR-PT AR063 (April – June 2024), in which Gradko scored 100%. The percentage score reflects the results deemed to be satisfactory based upon the z-score of $< \pm 2$.

The precision of the current 12 local authority co-location studies in 2024 detailed within the national bias adjustment factor spreadsheet (version 04/25) was rated as ‘good’ (tubes are

considered to have "good" precision where the coefficient of variation of duplicate or triplicate diffusion tubes for eight or more periods during the year is less than 20%). Further information on the precision summary results can be found on the LAQM website.

Diffusion tube monitoring during 2024 was undertaken in line with the Diffusion Tube Monitoring Calendar and recommended exposure period (4 or 5 whole weeks (+/- 2 days)).

Diffusion Tube Annualisation

As per LAQM.TG(22), annualisation is required for any site which has a data capture of less than 75%, but greater than 25%. Annualisation was required for one site (D11 Whinfield Road) for the 2024 monitoring period.

Diffusion Tube Bias Adjustment Factors

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

Diffusion tubes for Darlington Borough Council are supplied and analysed by Gradko International Ltd. The tubes were prepared using the 50% TEA in acetone preparation method. The national bias adjustment factor for Gradko 50% TEA in acetone is 0.88 for the year 2024 (based on 12 studies) as derived from the National Bias Adjustment Factor Spreadsheet (version 04/25).

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:	Step 2:	Step 3:	Step 4:
Select the Laboratory that Analyses Your Tubes from the Drop-Down List	Select a Preparation Method from the Drop-Down List	Select a Year from the Drop-Down List	Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor[3] shown in blue at the foot of the final column.
If a laboratory is not shown, we have no data for this laboratory.	If a preparation method is not shown, we have no data or this method at this laboratory.	If a year is not shown, we have no data[2]	If you have your own co-location study then see footnote[4]. If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953

Analysed By[1]	Method (To undo your selection, choose (All) from the pop-up list)	Year[2] (To undo your selection, choose (All))	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m³)	Automatic Monitor Mean Conc. (Cm) (µg/m³)	Bias (B)	Tube Precision[4]	Bias Adjustment Factor (A) (Cm/Dm)
Gradko	50% TEA in Acetone	2024	UB	City Of London Corporation	10	26	21	26.8%	G	**0.79**
Gradko	50% TEA in Acetone	2024	R	City Of London Corporation	12	34	30	12.1%	G	**0.89**
Gradko	50% TEA in Acetone	2024	UB	Falkirk Council	11	13	13	-1.6%	G	**1.02**
Gradko	50% TEA in acetone	2024	SU	Redcar And Cleveland Borough Council	12	12	9	35.4%	G	**0.74**
Gradko	50% TEA in acetone	2024	KS	Marylebone Road Intercomparison	11	43	36	20.8%	G	**0.83**
Gradko	50% TEA in acetone	2024	R	Sandwell Mbc	12	30	25	24.2%	G	**0.81**
Gradko	50% TEA in acetone	2024	UB	Sandwell Mbc	12	19	17	8.0%	G	**0.93**
Gradko	50% TEA in acetone	2024	R	Sandwell Mbc	12	20	20	-2.6%	S	**1.03**
Gradko	50% TEA in Acetone	2024	R	London Borough Of Merton	12	27	22	25.7%	G	**0.80**
Gradko	50% TEA in acetone	2024	UB	London Borough Of Wandsworth	10	19	14	31.7%	G	**0.76**
Gradko	50% TEA in acetone	2024	R	London Borough Of Richmond Upon Thames	12	18	19	-9.1%	G	**1.10**
Gradko	50% TEA in acetone	2024	B	London Borough Of Richmond Upon Thames	12	13	13	5.0%	G	**0.95**
Gradko	50% TEA in acetone	2024		**Overall Factor[3] (12 studies)**				**Use**		**0.88**

As there is currently no local co-location study within Darlington Borough Council the national factor has been applied to the 2024 monitoring data.

A summary of bias adjustment factors used by Darlington Borough Council over the past five years is presented in Table C.1.

Table C.1 – Bias Adjustment Factor

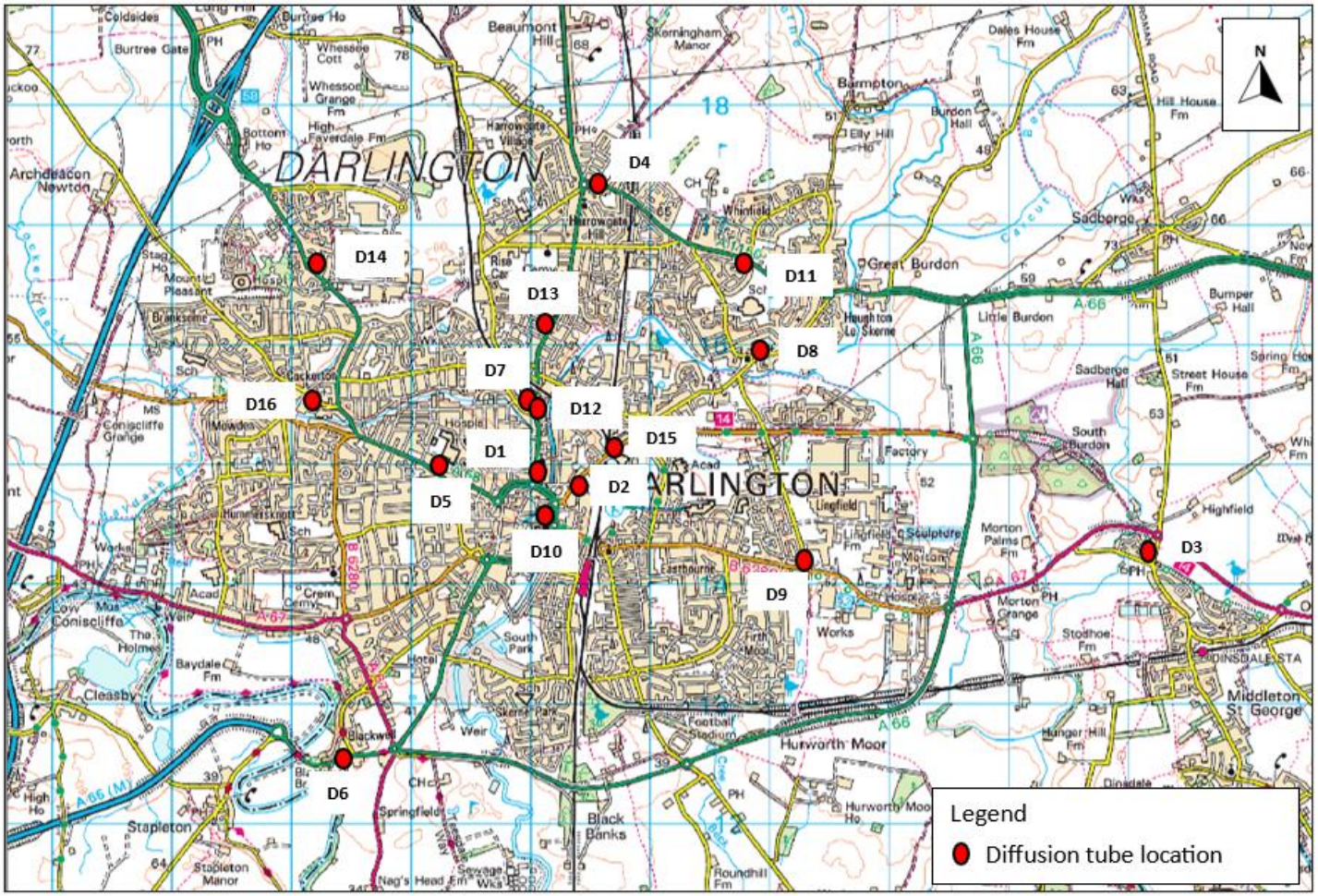
Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.88
2023	National	03/24	0.83
2022	National	03/23	0.82
2021	National	03/22	0.83
2020	National	03/21	0.82

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. No diffusion tube NO_2 monitoring locations within Darlington Borough Council required distance correction for 2024.

Appendix D: Map of Monitoring Locations

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



Site ID	Maximum monthly NO_2 ($\mu g/m^3$)	Annual* NO_2 ($\mu g/m^3$)
D7	42.3	26.1
D1	41.7	29.0
D6	36.5	24.8
D10	35.9	25.2
D8	35.2	25.1
D11	34.8	20.4
D2	33.3	23.9
D15	32.9	21.1
D9	32.6	18.4
D12	32.4	23.8
D13	30.2	20.0
D4	30.0	18.7
D5	29.8	16.7
D3	25.0	11.2
D16	24.9	12.8

Arrow relates to monthly figures

*bias adjusted and annualised

Appendix E: Summary of Air Quality Objectives in England

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

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

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

Appendix F: Campaign documents

Image 1: Poster provided to retailers

Image 2: Billboard graphic

A news article can be found at the following:

https://www.darlington.gov.uk/your-council/news/news-item/?id=1981

The updated website information is at:

https://www.darlington.gov.uk/media/19708/clearing-the-air-in-smoke-control-zones-2.pdf

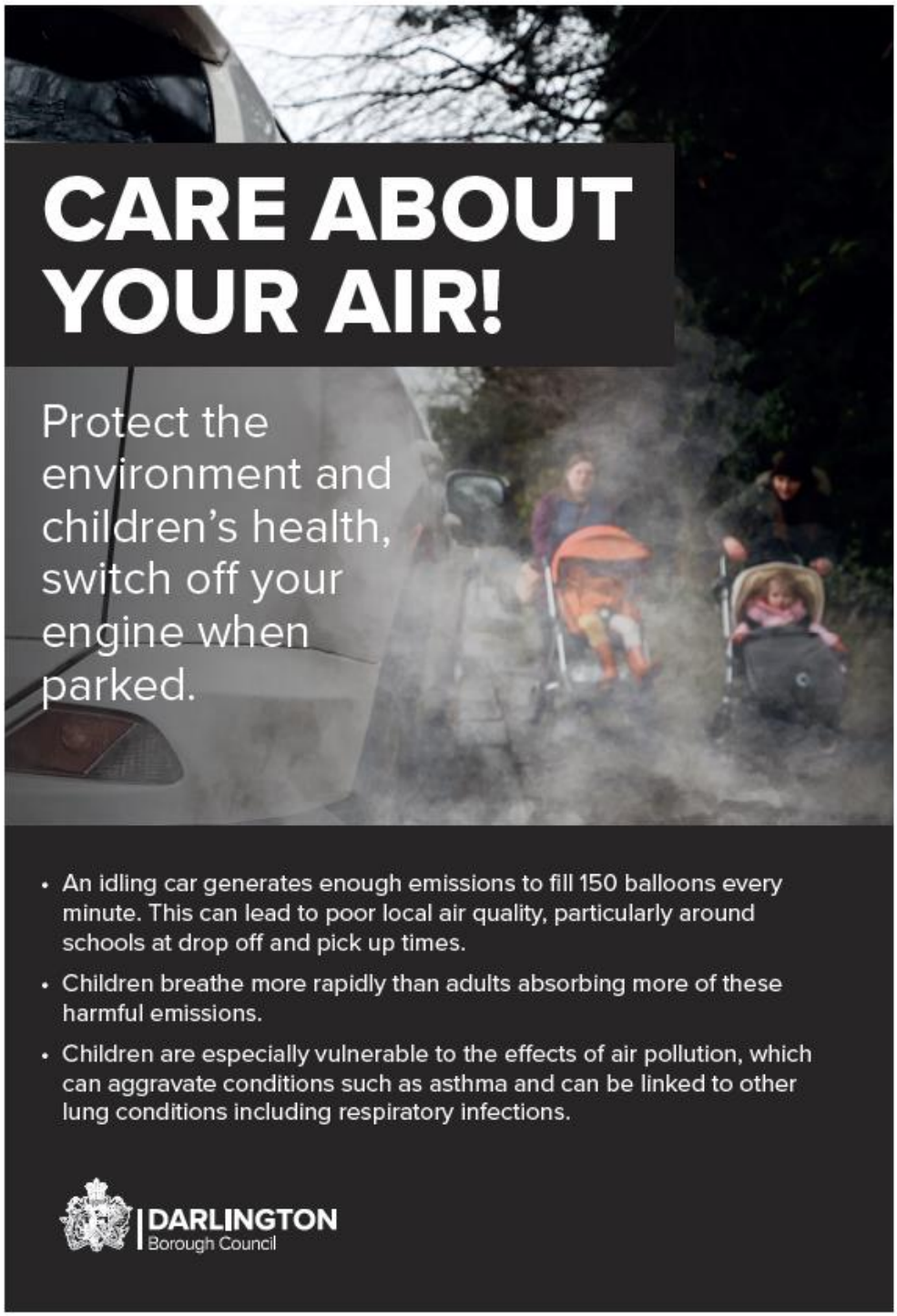


Image 1: Information provided to schools and lamppost signage

Image 2: Social media graphic

Image 3: Banner signage

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
AURN	Automatic Urban and Rural Network
BSIP	Bus Service Improvement Plan
DBC	Darlington Borough Council
Defra	Department for Environment, Food and Rural Affairs
EVCP	Electric Vehicle Charge Point
HIA	Health Impact Assessment
LAQM	Local Air Quality Management
LCWIP	Local Cycling and Walking Infrastructure Programme
LPG	Liquid Petroleum Gas
NGV	Natural Gas Vehicle
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
S&DR	Stockton and Darlington Railway
SO_2	Sulphur Dioxide
STP	Strategic Transport Plan
TVCA	Tees Valley Combined Authority
TVEPG	Tees Valley Environmental Protection Group
UTMC	Urban Traffic Management Control
ZEBRA	Zero Emission Bus Regional Areas (Scheme)

References

- Air Quality Strategy – Framework for Local Authority Delivery. August 2023. Published by Defra.
- Darlington Borough Council 2024 Air Quality Annual Status Report.
- Darlington Borough Council Air Quality Strategy 2024 - 2029
- Darlington Borough Council Electric Vehicle Charging Policy, February 2025.
- Darlington Borough Council Local Plan (2016-2036), adopted February 2022.
- Darlington Borough Council The Council Plan 2024 – 2027.
- Darlington Borough Council Transport Plan (2022-2030).
- Darlington Borough Council Travel Plan Guidance 2024 Update.
- Diffusion Tube Data Processing Tool version 5.3, published March 2025, Defra.
- Health Impact Assessment in spatial planning 'A guide for local authority public health and planning teams', published October 2020, Public Health England.
- 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.
- 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.
- National Diffusion Tube Bias Adjustment Factor Spreadsheet, published April 2025.
- Public Health Outcomes Framework. Published by the Office for Health Improvement & Disparities.
- Tees Valley Combined Authority Strategic Transport Plan (2020 – 2030), published 2020, Tees Valley Combined Authority.