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

Information	East Hertfordshire District Council Details
Local Authority Officer	Claire Spendley
Department	Place Directorate
Address	Wallfields, Pegs Lane, Hertford, SG13 8EQ
Telephone	01992 531476
E-mail	Claire.spendley@eastherts.gov.uk
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Local Responsibilities and Commitment

This ASR was prepared by the Environmental Health Department of East Hertfordshire District Council.

This ASR has been approved by:

Paul Thomas-Jones
Environmental Health Service Manager
East Hertfordshire District Council

This ASR has not been signed off by a Director of Public Health.

East Hertfordshire District Council, Wallfields, Pegs Lane, Hertford, SG13 8EQ

environmental.health@eastherts.gov.uk

Executive Summary: Air Quality in Our Area

Air Quality in East Hertfordshire District Council

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

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

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

Table ES 1 - Description of Key Pollutants

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

East Hertfordshire is the most rural district in the Hertfordshire and has a great deal of natural and built heritage in the combination of villages and market towns. Although the district's countryside character means it has an important agricultural base, the local

economy is dominated by the service sector with the majority of the firms being small and medium sized enterprises.

There are three areas in East Hertfordshire where a combination of traffic congestion and road layout had led to Nitrogen Dioxide (NO_2) concentrations being in exceedance of the UK annual mean air quality objective. These areas are known as Air Quality Management Areas (AQMA). The locations of the AQMAs can be found in Appendix D, and the AQMAs are also included within the national list of AQMAs or on the council website Air Quality | East Hertfordshire District Council District Council

East Hertfordshire District Council have been monitoring air pollution at various locations around the district since the LAQM regime began in 1995. Diffusion tubes are predominantly used for monitoring and in 2016 a new continuous monitoring site was commissioned at Gascoyne Way, Hertford (measuring particulate matter ($PM_{2.5}$))[1] alongside the existing NO_2 monitor.

Our continuous monitoring results have shown NO_2 and $PM_{2.5}$ levels on a downward trajectory which has also been continued this past year with NO_2 levels down from 25ugm^3 to 22ugm^3 and $PM_{2.5}$ levels stable at 8ugm^3 between 2023 and 2024 respectively.

The diffusion tube results highlight a downward trend in all locations other than one location within Hertford. Only one exceedance of the annual objective was recorded which was inside of Bishop's Stortford AQMA.

Three new AQ sensors have been installed in the district, however there are currently technical issues with the data and therefore the results of these are not being reported in this ASR.

[1] https://www.airqualityengland.co.uk/local-authority/?la_id=408

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.

Joint working

The Council continues to disseminate pollution alerts through the Herts and Beds alert system as well as supporting and promoting alert services. Local Authority Data - Air Quality monitoring service (airqualityengland.co.uk)

The Hertfordshire and Bedfordshire Air Quality Forum, continue to meet quarterly (virtually). The group includes representatives from Hertfordshire district councils, public health professionals in addition to Hertfordshire County Council transport professionals. The group works on identifying and addressing local priorities and challenges.

We work closely with our partners at Hertfordshire County Council (HCC) and have produced a new Air Quality Action Plan (AQAP) for which a number of key stakeholders, across public health and transport at HCC were involved in.

We have also been holding quarterly meetings over the past year with HCC colleagues and councillors to work towards joint AQ actions and goals to provide a more coordinated response.

Public awareness

Air Quality Website

Using grant funding from the UK shared prosperity fund, a new, user-friendly air quality website has been launched; providing residents with easy access to clear, reliable, and up-to-date air quality information. Designed with a modern layout, the website is simple to navigate and includes an interactive children's zone to help younger audiences learn about air quality in an engaging way.

Residents can view both current and historic air quality data, search for levels of specific pollutants, and better understand how air quality may affect their health and daily activities. The website also enables users to sign up for free notifications through the Hertfordshire and Bedfordshire Air Pollution Alert System, which sends timely alerts and updates directly to their mobile phones during periods of raised air pollution.

This new online resource aims to improve public awareness, support informed decision-making, and make air quality information more accessible for individuals, families, and communities across the area. Home - East Herts Air Quality

Breathe Clean

The DEFRA-funded project ran from 2023 to 2024, aiming to improve air quality across Hertfordshire and Bedfordshire by combining education, community engagement, workplace initiatives, and public awareness campaigns. It focused on helping residents, schools, and businesses take practical steps to reduce pollution and promote healthier, sustainable travel choices.

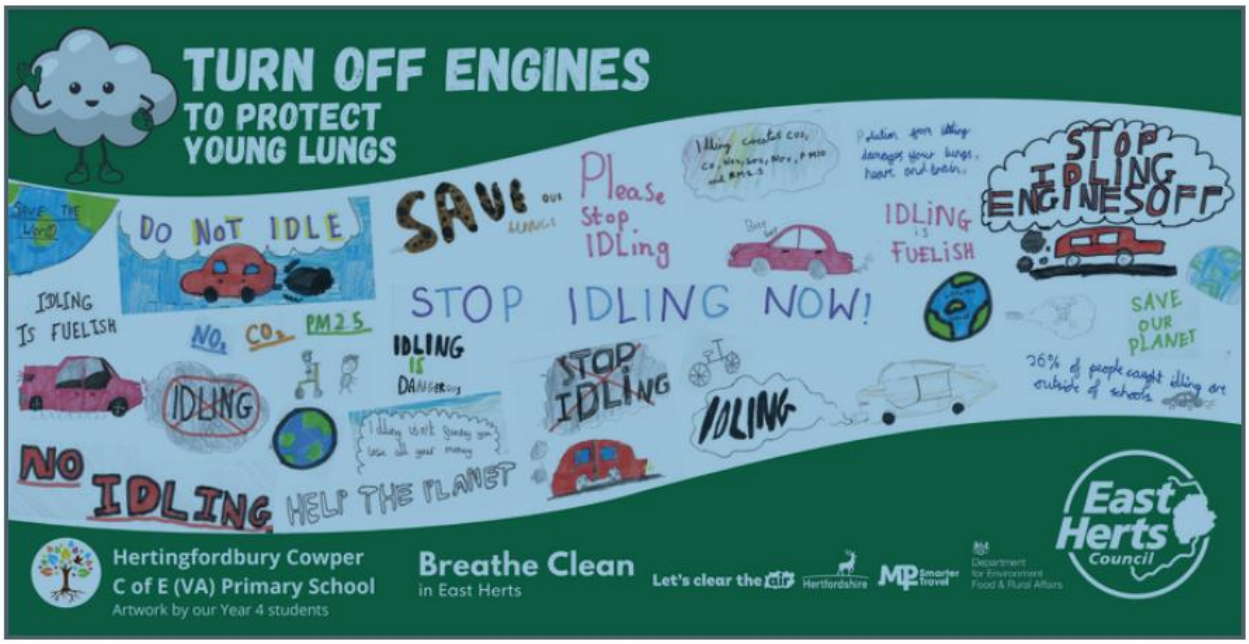
Key Activities:

- **Schools:** Delivered workshops on air quality, anti-idling, healthy walking routes, and active travel, complemented by an inter-school competition to encourage pupil-led action.
- **Community involvement:** Engaged community groups in sustainability events, air quality monitoring, and anti-idling enforcement.
- **Workplace engagement:** Supported six businesses in developing travel plans to promote walking, cycling, and public transport, highlighting both environmental and health benefits.
- **Public awareness:** Launched three social media campaigns, with ongoing posts to raise knowledge of air quality issues.

Key Outputs:

- 37 schools contacted; 17 received workshops.
- 103 air quality workshops delivered, including five student-led video workshops.
- Activities carried out in Ware, Hertford, Sawbridgeworth, and Bishop's Stortford.

  331 survey responses collected from pupils, parents, and teachers, covering travel choices, air pollution awareness, and barriers to greener travel.
- Practical initiatives included pupil-led anti-idling patrols outside schools.
- 15 anti-idling banners produced.



Clean Air Day

On clean air day alongside messages regarding our four main AQ campaigns we also used it to announce and highlight: our biodiversity crisis, with its co-benefit links to air quality: Council declares Ecological and Biodiversity Crisis | East Herts District Council

Air quality action plan

East Hertfordshire District Councils' AQAP was formally adopted in February 2024, the plan has multiple actions under the four main themes and priorities of the council;

Priority 1: Reduce the impact of traffic levels and congestion on air quality

The main source of air pollution leading to the declaration of the AQMA is road transport emissions. Therefore, reducing transport emissions is the key priority. Our approach focuses on areas where East Hertfordshire DistrictCouncil has direct control (for example, planning and procurement of outsourced functions) and areas where measures can be implemented via a partnership with Hertfordshire County Council (HCC) or others, with the necessary monitoring arrangements put in place, for example sustainable travel plans need to be in place for business and schools and checked to see if they are working.

As the roads contributing to pollutant concentrations which result in exceedance of the annual average NO_2 objective are not managed by National Highways, this Relevant Public Authority has not been engaged with for the purpose of preparing this AQAP.

Across the council and its partners, there are already multiple efforts in place to improve uptake in cleaner vehicles. This includes provision of additional electrical vehicle charging, incentives for taxis to use electric or Euro VI vehicles and improvements in technology in buses used within the district.

Priority 2: Mitigate the impact of future growth on air quality

Construction and demolition activities can have a significant impact on local air quality. These impacts can be minimised by using the planning system to ensure best practice techniques are employed on all sites.

New or refurbished buildings have the potential to add to emissions from domestic heating and cooling. These impacts can be addressed directly through emissions limits or indirectly by reducing the energy demand in new buildings.

New residents will need to travel for work and leisure. The impact of this can be addressed by measures to encourage walking and cycling or by working with Hertfordshire County Council (HCC) to further improve public transport provision.

An increased provision of services to meet extra demand such as refuse collections will create additional emissions. Negative impacts can be reduced by designing new developments with due consideration to operational efficiency and ensuring only the cleanest vehicles are used.

New roads have the potential to increase pollutant concentrations unless they are well designed and well placed. East Hertfordshire Districts Council will work closely with HCC to ensure that necessary infrastructure improvements are well designed and well placed to minimise any detrimental effects on air quality.

The Local Plan and its policies set out the considerations that will be applied by East Hertfordshire District Council for all development proposals. The council will work with developers and partner organisations to ensure the delivery of infrastructure, services and community facilities necessary to develop and maintain sustainable communities. This will not only apply to air quality but all relevant environmental aspects. Further Section 106 agreements will be sought to secure funding for future mitigation measures as appropriate where development will increase pollutant concentrations.

Existing strategies and policies adopted by East Hertfordshire District Council and HCC are key mechanisms for reducing emissions across the district. Transport is the main source of NO_x emissions, and therefore NO_2 concentrations, within the AQMAs. For effective reductions in NO_x emissions, in addition to the implementation of the measures

outlined within the AQAP, future revisions of the Council's and Hertfordshire County Council's Transport Plans, Freight Strategies, Climate Change Strategies, Cycle Strategies and the like should all be completed with potential air quality impacts taken into account.

The review of the Council's District Plan, which will take place within the lifetime of this AQAP, will provide a crucial means to continued and expanded efforts to mitigate the impact of development on air quality.

Priority 3: Support residents' make active travel choices

One of the most effective ways to achieve a reduction in vehicle numbers is to change the attitudes and behaviour of the population towards travel. East Hertfordshire District Council and its partners will encourage and facilitate these changes through implementing a suite of interventions that have been informed by insights into the key factors affecting travel behaviour.

Measures will include education and awareness raising alongside schemes which incentivise change.

Reducing the need to travel promotes car free neighbourhoods which in turn provide good quality outdoor spaces, encourage residents to be more active and has benefits for mental health and wellbeing. Indeed, measures to encourage active travel such as walking and cycling can support residents to achieve and maintain an active lifestyle, which has additional health benefits beyond those achieved through improving air quality.

Ensuring that outdoor spaces are protected from pollution sources not only makes them more pleasant to use but reduces resident's exposure.

Improving air quality to protect public health requires a wide-reaching perspective which is not specific to the AQMAs but instead aims to have a broader impact across the district.

Priority 4: Reduce East Hertfordshire District Council Council's own impact on air quality

We have already replaced all our diesel vans with electric vehicles. We will continue to extend the use of these vehicles beyond the services making most use of them, notably our environmental services team, by promoting the vehicles for use as a staff car club in order to reduce officers using their own fossil-fuelled vehicles when on council business.

We will also continue to make steps towards greening the fleets of our contractors, notably our waste management contractor. Procurement processes are key to this next step and

we know that seeking higher environmental standards from council suppliers and contractors would accelerate moves to replacement of fossil-fuelled vehicles across the whole district.

Air quality monitoring:

We continued to maintain our continuous monitoring station and diffusion tube monitoring networks because there are critical for understanding where pollution is most acute, and what measures are effective to reduce pollution. Our hourly readings can be viewed from Herts Air Quality Network's pollution analysers [2] online. Our air quality forecasting services is available via uBreathe[3] App. This app provides air pollution health advice where and when its needed most via the colour-coded UK map that locates where you are and provides you instant access to current and forecast air pollution information.

We have three new sensors installed within each of the AQMA's in the district however there has been data accuracy issues with these during 2024 and we are still working with the suppliers to resolve these, so no useable data has come from these yet so data from these units has been excluded from this ASR.

Likely future impacts on air quality

There have not been any new major sources of emissions introduced into East Hertfordshire in 2024; however the District Plan sets out a framework to deliver a minimum of 18,458 new dwellings and the associated infrastructure by 2033. Neighbouring districts also need to accommodate similar levels of growth and there is a proposal for the expansion of Stanstead Airport (located on the Eastern boundary of East Hertfordshire) from 35million passengers per annum (mppa) with agreement already to increase this to 43mppa and the planned extension taking this to 51mppa. Therefore, the cumulative impact of this scale of developments is likely to generate an increase in road traffic within and through East Hertfordshire and so potentially increase the emission of air pollution. This represents the only currently foreseeable major future source of air pollution in the district that could impact upon the air quality particularly in Bishop's Stortford the nearest

8 Air quality in England (airqualityengland.co.uk)

9 http://www.ricardo-aea.com/ubreathe/.

town to the airport which already has an AQMA. We are working closely with our partners to inform on this planning application and ensure AQ has been sufficiently addressed and mitigated

Conclusions and Priorities

Only one exceedance of the objective levels was seen this year which was within the AQMA of Bishops Stortford.

The general trend across all but one monitoring locations has been a decrease in concentrations which follows the pre-pandemic trend of pollution owing to a combination of factors such as greener fleets and more flexible working patterns.

Monitoring results within the AQMAs of Hertford and Sawbridgeworth were below the objective levels, it is not however possible to revoke these AQMA's as there has not been five consecutive years of 10% below the objective level excluding the pandemic years. As Sawbridgeworth saw exceedances in 2020-2022. Hertford also shows one result just within the 10% of the objective level this year at Old Cross Hertford reading at 36.9ugm^{3}.

How to get Involved

There are many ways in which the public can get involved in helping to improve air quality in their area, from using your car less, driving more efficiently when you do have to drive or considering a cleaner vehicle when you choose to upgrade your car. Many smart travel choices and other tips to reduce air pollution can be found in the links below:

Home - East Herts Air Quality (easthertsairquality.co.uk/)

Let's clear the air (www.hertfordshire.gov.uk/microsites/clean-air/clean-air.aspx)

Hertfordshire liftshare scheme (liftshare.com/uk/community/hertfordshire)

National clean air day campaign (www.environmental-protection.org.uk/national-clean-air-day/)

Public transport journey planning (www.traveline.info/)

Central Government website about low emission vehicles (www.goultralow.com/)

East Hertfordshire District Council live monitoring data (www.airqualityengland.co.uk/local-authority/?la_id=408)

Diffusion tube locations (www.airqualityengland.co.uk/local-authority/hnb-diffusion-tubes)

AQMA maps (uk-air.defra.gov.uk/aqma/maps/?t=635861666056569563)

Locations of EV charging points across UK (www.zap-map.com/live/)

HCC Local Transport Plan (www.hertsdirect.org/services/transtreets/ltplive/)

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Figures

Tables

1 Local Air Quality Management

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

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

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

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

A summary of AQMAs declared by East Hertfordshire District Council can be found in Table 2.1. The table presents a description of the Three AQMAs that are currently designated within East Hertfordshire. Appendix D: Map(s) of Monitoring Locations and AQMAs provides maps of AQMAs and also the air quality monitoring locations in relation to the AQMAs. The air quality objectives pertinent to the current AQMA designations are as follows:

- NO_2 annual mean

Table 2.1 – Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
AQMA 1 Hockerill Junction, Bishop`s Stortford (516)	2007	NO_2 annual mean	An area encompassing a number of properties around the junction of Dunmow Road, Hockerill Street, London Road and Stanstead Road in	No	**54**	**41.1** (distance corrected)	Not compliant	East Hertfordshire District Council AQAP 2025-2030	http://www.eastherts.gov.uk/article/9550/Air-Quality

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
			Bishops Stortford.						
AQMA 2 Gascoyne Way, Hertford (663)	2010 Amended 21/08/2012	NO_2 annual mean	A number of properties in central Hertford. .	No	**46**	36.9	Four including two covid years, so two excluding covid years	East Hertfordshire District Council AQAP 2025-2030	http://www.eastherts.gov.uk/article/9550/Air-Quality

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
AQMA 3 London Road Sawbridgeworth (1590)	2015	NO_2 annual mean	London Rd and Cambridge Rd and the adjoining roads.	No	**45**	35.7 (distance corrected)	Not compliant (within 10% of limit value)	East Hertfordshire District Council AQAP 2025-2030	http://www.eastherts.gov.uk/article/9550/Air-Quality

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

☒ **East Hertfordshire District Council confirm that all current AQAPs have been submitted to Defra**

Current year level of exceedance results have been taken from diffusion tubes:

19, 39 & 40 London Road in Bishop's Stortford

25 at Old Cross in Hertford (Please note this is a different diffusion tube location than used in previous ASRs at DEFRAs request)

57 on London Road in Sawbridgeworth

2.2 Progress and Impact of Measures to address Air Quality in East Hertfordshire District Council

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

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. Multiple minor errors are present throughout the report which must be corrected prior to submission:

a. In Tables A.1 and A.2, it has not been stated which AQMA EH79 is located in. This should be added.

b. Microsoft Word review comments have been left in the report (page 9). These should be removed.

c. Correct any subscripts for pollutant (e.g. NO2 on page v).

d. For the results tables (Tables A.3-A.9), all values should be presented to the same number of decimal places for consistency. It is recommended that the Council presents all values to 1 decimal place.

2. The Council have provided good mapping of all monitoring locations within the district. However, the Council are highly encouraged to update some of the labels in their figures to improve readability.

3. The Council has considered the comments made during previous appraisals. This is commended and the Council is encouraged to continue this approach for ASRs.

4. The Council is recommended to continue to review their current monitoring regime, specifically the addition of several new monitoring sites across the region. The ongoing upgrade programme of EHDC's monitoring locations is welcomed.

5. Distance correction calculations provided are robust and the correct methodology has been applied to the 2023 data where applicable. This is commended.

6. Extensive trend graphs and analysis have been provided for monitoring data, which is commended.

7. The Council are commended for their extensive measures to help address PM2.5 emissions.

East Hertfordshire District Council has taken forward a number of direct measures during the current reporting year of 2024 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2. 22 measures are included within Table 2.2, with the type of measure and the progress East Hertfordshire District Council have made during the reporting year of 2024 presented. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2.

More detail on these measures can be found in their respective Action Plans Executive summary

Key completed measures are:

- Creation of an East Hertfordshire District Council standalone air quality website
- New waste contract requiring; all fleet vehicles under 3.5 tonne and some road sweepers moved to electric vehicles. All waste vehicles will also run on HVO reducing their air quality and carbon impacts
- Begun procurement exercise for EV charging infrastructure roll out in the district
- Completion of our Breathe Clean project;

The DEFRA-funded project ran from 2023 to 2024, aiming to improve air quality across Hertfordshire and Bedfordshire by combining education, community engagement, workplace initiatives, and public awareness campaigns. It focused on helping residents, schools, and businesses take practical steps to reduce pollution and promote healthier, sustainable travel choices.

Key Activities:

- **Schools:** Delivered workshops on air quality, anti-idling, healthy walking routes, and active travel, complemented by an inter-school competition to encourage pupil-led action.
- **Community involvement:** Engaged community groups in sustainability events, air quality monitoring, and anti-idling enforcement.
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- **Public awareness:** Launched three social media campaigns, with ongoing posts to raise knowledge of air quality issues.

Key Outputs:

- 37 schools contacted; 17 received workshops.
- 103 air quality workshops delivered, including five student-led video workshops.
- Activities carried out in Ware, Hertford, Sawbridgeworth, and Bishop's Stortford.

  331 survey responses collected from pupils, parents, and teachers, covering travel choices, air pollution awareness, and barriers to greener travel.
- Practical initiatives included pupil-led anti-idling patrols outside schools.
- 15 anti-idling banners produced.

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

- HCC
- MP Smarter Travel

The principal challenges and barriers to implementation that East Hertfordshire District Council anticipates facing are lack of staffing and finances to pursue work in this area.

East Hertfordshire District Council expects the following measures to be completed over the course of the next reporting year:

- The procurement exercise for EV charging infrastructure to be completed, with a new contractor in place to deliver the rollout of charging points.
- Continued promotion of our four key air quality campaigns;
  Air Quality Alert System – a free to use, health based digital notification system which notifies users of days when air quality is poor in their area to help them make more informed choices about their activities that day.
  Electric vehicle uptake – continued promotion to increase e-vehicle uptake.
  Herts liftshare scheme – a free to use liftshare scheme matching users and locations to reduce lone journeys.
  Clean Air Day – national air quality campaign to highlight the effects of air pollution and positive ways in which we can all make a difference.

- Hertfordshire County Council, East Hertfordshire District Council Council and other stakeholders to maintain dialogue about any emerging operational and/or technical means of minimising congestion.
- Being able to receive and provide automatic data from our three new air quality sensors.

These see increased awareness and understanding of air pollution and provision of EV infrastructure helps speed up the uptake of EVs.

East Hertfordshire District Council anticipates that the measures stated above and in Table 2.2 will achieve compliance in all AQMAs.

Table 2.2 – Progress on Measures to Improve Air Quality

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
1.1	Continued expansion of EV infrastructure	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, gas fuel recharge	2024	2027	East Hertfordshire District Council Council	Private market / East Hertfordshire District Council Council/LEVI scheme	No	Funding through contract and potentially LEVI contribution	£10k-£50k	Implementation	0.5µg/m³ to 1µg/m³	Additional EV charging points installed and planned	
1.2	Explore emissions based parking charges	Promoting Low Emission Transport	Other	2024	2027	East Hertfordshire District Council Council	East Hertfordshire District Council Council	No	Not funded	£10k-£50k	Implementation and publicity	0.5µg/m³ to 1µg/m³	Not yet started	Potential lack of political and/or public support
1.3	Explore Last Mile Delivery possibilities in the district	Freight and Delivery Management	Freight Partnerships for city centre deliveries	2024	2028	East Hertfordshire District Council Council	East Hertfordshire District Council Council	No	Not funded	> £50k	Planning	0.5µg/m³ to 1µg/m³	Not yet started	Budget & resource constraints
1.4	Install additional anti-idling guidance	Public Information	Other	2024	2027	East Hertfordshire District Council Council & Hertfordshire County Council	East Hertfordshire District Council Council	No	Not funded	< £10k	Implementation	Up to 0.5µg/m³	Ongoing review, some installations already completed	Resource and budget constraints, permission issues for use of land or highways not in EH control
1.5	Continued promotion of our four key air campaigns	Promoting Travel Alternatives	Promotion of walking, promotion of cycling	2024	Ongoing	East Hertfordshire District Council Council & Hertfordshire County Council	East Hertfordshire District Council Council / HCC	No	Part funded	£10k-£50k	Implementation and publicity	0.5µg/m³ to 1µg/m³	Ongoing use of air alert scheme	
1.6	Review effectiveness of travels plans for schools and businesses	Promoting Travel Alternatives	Other	2024	2029	East Hertfordshire District Council Council & Hertfordshire County Council	East Hertfordshire District Council Council & Hertfordshire County Council	No	Funded	< £10k	Implemented	Up to 0.5µg/m³	Plans in place and being followed	Ongoing Budget constraints
1.7	Investigate the possible pros and cons of new options being adopted by other local authorities, such as road pricing and ultra-low emission zones (ULEZ) in the AQMAs	Promoting Low Emission Transport	Low Emission Vehicles, EV recharging, gas fuel recharge	2024	2026	East Hertfordshire District Council Council & Hertfordshire County Council	East Hertfordshire District Council Council & Hertfordshire County Council	No	Funded	> £50k if adopted	Planning	1µg/m³ to 2µg/m³	Not yet started	Members requested this action. Public Objections to even investigating the idea

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
1.8	Hertfordshire County Council, East Hertfordshire District Council Council and other stakeholders to maintain dialogue about any emerging operational and/or technical means of minimising congestion	Traffic Management	Other	2024	2029	East Hertfordshire District Council Council & Hertfordshire County Council	East Hertfordshire District Council Council & Hertfordshire County Council	No	Not funded	< £10k	Planning	Up to 0.5µg/m³	Ongoing meetings between EH and HCC	Budget & resource constraints
1.9	Monitor and act upon emerging guidance on the new national $PM_{2.5}$ objectives	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2024	2029	East Hertfordshire District Council Council & Hertfordshire County Council	East Hertfordshire District Council Council & Hertfordshire County Council	No	Funded	< £10k	Planning	0µg/m³	Not started	Budget & resource constraints
2.1	Hertfordshire Essex Rapid Transit (HERT)/ The A414 Corridor Strategy	Traffic Management	Other	2028	ongoing	HCC	HCC	No	Fully funded	> £50k	Implementation	2µg/m³ to 3µg/m³ *note: only applies to Hertford AQMA*	Ongoing implementation	Early options and business case completed
2.2	Continued adherence to our Sustainability SPD and air quality neutral policies	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2018	2024	East Hertfordshire District Council Council	East Hertfordshire District Council Council	No	Fully funded	< £10k	Implementation	Up to 0.5µg/m³	In place and to be reviewed through planning process when new local plan is produced	Overriding viability factors on developers complying with higher standards
2.3	Create a sustainable design and construction code of practice (CCOP).	Policy Guidance and Development Control	Other	Review due to start in 2024	Ongoing	East Hertfordshire District Council Council	East Hertfordshire District Council Council and gov funding	No	Not funded	< £10k	Planning	Up to 0.5µg/m³	Not started	Not yet started Lack of resources or political will
3.1	Support expansion of Herts Lynx on demand public transport scheme	Transport Planning and Infrastructure	Other	2024	2024	HCC	DfT / HCC	No	DfT funding being sought	> £50k	Implementation	Up to 0.5µg/m³	Scheme in place	Availability of government funding is crucial
3.2	Investigate potential implementation	Promoting Travel Alternatives	Promotion of Walking	2024	2029	East Hertfordshire District Council	East Hertfordshire District Council	No	Not funded	£10k - £50k	Planning	0.5µg/m³ to 1µg/m³	Initial stages of viability	Resources and funding

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
	of footstreets in central Hertford					Council/Herts County Council	Council/Herts County Council							
3.3	Develop personalised travel planning for residents	Promoting Travel Alternatives	Personalised Travel Planning	2024	Ongoing	Herts County Council	Herts County Council	No	TBC	£10k - £50k	Implementation	Up to 0.5µg/m³	Development of travel plans	A Bishop's Stortford Town wide travel plan (including Personalised Travel Planning) is being developed
3.4	Active Travel Campaign working with schools and businesses	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	2024	2029	East Hertfordshire District Council Council	East Hertfordshire District Council Council	No	Not funded	£10k - £50k	Planning	Up to 0.5µg/m³	Not started	Resources and funding barriers
3.5	Local Cycling and Walking Infrastructure Plan (LCWIP)	Promoting Travel Alternatives	Promotion of cycling	2024	2025	Herts County Council	Herts County Council	No	Fully Funded	£10k - £50k	Implementation	Up to 0.5µg/m³	Work to deliver a continuous shared-use cycling and pedestrian path along the eastern side of London Road and Station Road in Buntingford is progressing well. Works are on track to complete in Summer 2023 before the Buntingford First School opens in September	Funding & resource
3.6	Exploration of increased on street town centre cycle parking	Promoting Travel Alternatives	Other	2024	2029	HCC	HCC	No	Not funded	£10k - £50k	planning	Up to 0.5µg/m³	Storage in place	Funding & resource
3.7	Creation of an East Hertfordshire District Council standalone air quality website	Promoting Travel Alternatives	Other	2024	2029	East Hertfordshire District Council Council	East Hertfordshire District Council Council	No	Not funded	£10k - £50k	Complete	Up to 0.5µg/m³	Website in place	Funding & resource to continue last the initial 5 years funding
4.1	New council procurement rules	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	2025	2025	East Hertfordshire District Council Council (and North Herts Council as part of waste management consortium)	East Hertfordshire District Council Council	No	Fully funded	< £10k	Implementation	Up to 0.5µg/m³	New council procurement rules to consolidate and reduce deliveries to council buildings	
4.2	Create East Hertfordshire District Council	Promoting Travel Alternatives	Other	2024	2029	East Hertfordshire District Council Council	East Hertfordshire	No	Unfunded	< £10k	Amended travel patterns	Up to 0.5µg/m³	Not started	Lack of political appetite / resources

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
	Council workplace travel plans for staff						District Council Council							
4.3	Work with colleagues in HCC Trading Standards to ensure the Domestic Solid Fuels Regulations are complied with	Policy Guidance and Development Control	Other	2024	2029	East Hertfordshire District Council Council / HCC	East Hertfordshire District Council Council / HCC	No	Unfunded	< £10k	Publicity and enforcement	Up to 0.5µg/m³	Not started	Work not yet started Lack of resource

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[4], local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter ($PM_{2.5}$)). There is clear evidence that $PM_{2.5}$ (particulate matter smaller 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

The Air Quality Expert Group (2015) estimate that UK emissions contribute to approximately 50-55% of the total annual average $PM_{2.5}$ in the UK. The European Environment Agency estimates that road transport sources contribute to 13% of European emissions of $PM_{2.5}$ in 2013. Data presented by the Air Quality Expert Group (2015) estimated the contribution from traffic to be 7% in the UK. This emphasises that a large proportion of airborne PM2.5 originate from other sources, including sea-salt, inorganic aerosols, organic aerosols and non-traffic generated rural and urban particulates including biomass burning both domestic and commercial. There is clear evidence that $PM_{2.5}$ has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases. The obligation placed upon local authorities in respect of $PM_{2.5}$ is that they are expected to work towards reducing emissions and concentrations of $PM_{2.5}$ in their local area as practicable and consider action if necessary to address $PM_{2.5}$ issues in their area, and aligning those interests with those public health officers.

However policy guidance LAQM.PG16 does not prescribe what the local authority role should be; it is for the local authority in consultation with its public health officials and others to consider how it wishes to define this role.

Whilst there are no numerical limit values prescribed for $PM_{2.5}$ for England and no statutory obligations on local authorities in respect of monitoring concentrations of $PM_{2.5}$ in the ambient air, the EU Ambient Air Quality Directive has identified 25ug/m3 as a limit value to be met by 2020 and the World Health Organisation (WHO) has set an air quality guideline of 10ug/m3 as an annual mean for $PM_{2.5}$.

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

The only specific indicator for $PM_{2.5}$ is included within the Public Health Outcomes Framework (Public Health Outcome Indicator (PHOI) 3.01) which is stated as: 'The fraction of annual all-cause mortality attributable to long-term exposure to current levels of anthropogenic particulate pollution.' This indicator is based on an estimated amount of PM2.5 derived by Defra modelling from local measurement, including one site in Borehamwood, Hertfordshire and another in Bedfordshire. That data has been adjusted by way of population to give a population weighted figure before its use in deriving the PHOI. The $PM_{2.5}$ focused PHOI reflects the adverse impact that this type of air pollution can have on public health as a result of the fine particles being carried deep into the lungs where they can cause inflammation and a worsening of heart and lung diseases.

Within Hertfordshire joint working on air quality issues between the local authorities and Hertfordshire County Council for $PM_{2.5}$ as part of the Herts and Beds air quality group has included a local monitoring project. The aim has enabled the collection of real-time direct measurements of $PM_{2.5}$ concentrations from multiple locations within Hertfordshire in order to address the paucity of $PM_{2.5}$ data available within the County.

The Hertfordshire Local Authorities Report on Particulate Matter ($PM_{2.5}$) in Ambient Air for Hertfordshire County Council Public Health
PM2_5_2022_data_Report_for_PH_2023_FINAL.pdf (airqualityengland.co.uk) identifies that it is important to recognise that the figures published for PHOI 3.01 are estimates and therefore cannot be used for performance monitoring; they can only provide an indication of the scale of the issue. Further information on the use of health related air quality data is available at:

PH Briefing Note - Air Quality: FAQs about the data (hertshealthevidence.org)

It is for this reason that the report does not make direct reference to the PHOI figures, but uses the population weighted Defra modelled $PM_{2.5}$ concentrations in their place.

East Hert District Council is taking the following measures to address $PM_{2.5}$:

- all the actions in our action plan serve not only to help reduce NO_2 emissions but also those of $PM_{2.5}$,
- the council are also engaging with the local health and well-being board to help raise the profile of air quality with a view to link in more closely with the health agenda in the future,

East Hertfordshire District Council does not have any smoke control areas to report on.

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

This section sets out the monitoring undertaken within 2024 by East Hertfordshire District Council and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a five-year period between 2020 and 2024 to allow monitoring trends to be identified and discussed.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

East Hertfordshire District Council undertook automatic (continuous) monitoring at one site during 2024. Table A.1 in Appendix A shows the details of the automatic monitoring sites. Local authorities do not have to report annually on the following pollutants: 1,3 butadiene, benzene, carbon monoxide and lead, unless local circumstances indicate there is a problem. The automatic monitoring results [5]for East Hertfordshire District Council, with automatic monitoring results also available through the UK-Air website .

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

3.1.2 Non-Automatic Monitoring Sites

East Hertfordshire District Council undertook non- automatic (i.e. passive) monitoring of NO_2 at 34 sites with 7 of those triplicate sites during 2024. Table A.2 in Appendix A presents the details of the non-automatic sites.

Maps showing the location of the monitoring sites are provided in Appendix D. 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.

[5] https://www.airqualityengland.co.uk/local-authority/data?la_id=408

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)

Our continuous monitoring results have shown NO_2 and $PM_{2.5}$ levels on a downward trajectory which has also been continued this past year with NO_2 levels down from 25ugm3 to 22ugm3 and $PM_{2.5}$ levels stable at 8ugm3 between 2023 and 2024 respectively.

The diffusion tube results highlight a downward trend in all locations other than one location within Hertford. This follows the pre pandemic trend of pollution owing to a combination of factors such as greener fleets and more flexible working patterns. Only one exceedance of the annual objective was recorded which was within the Bishops Stortford AQMA.

Monitoring results within the AQMAs of Hertford and Sawbridgeworth were below the objective levels, it is not however possible to revoke these AQMA's as there has not been five consecutive years below the objective level excluding the pandemic years. As Sawbridgeworth saw exceedances in 2020-2022 and Hertford in 2019. Hertford also shows one result just within the 10% of the objective level this year at Old Cross Hertford reading at 36.9ugm3.

There were no exceedances of hourly mean.

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

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

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

3.2.2 Particulate Matter (PM_{10})

There are currently no PM_{10} monitors installed across East Hertfordshire.

3.2.3 Particulate Matter ($PM_{2.5}$)

Table A.6 in Appendix A presents the ratified and adjusted monitored $PM_{2.5}$ annual mean concentrations for the past five years.

The PM2.5 trend from 2021-2024 has shown a downward trend from 12ugm3, to 8ugm3 which has stabilised with 2023 and 2024 both showing a value of 8ugm3.

2019 and 2020 have reduced levels associated with covid which are not in line with general downward trend that's been shown for a number of years.

3.2.4 Sulphur Dioxide (SO_2)

There are currently no SO_2 monitors installed within East Hertfordshire.

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)
EH79	Gascogyne Way	Roadside	532464	212338	NO_2, $PM_{2.5}$	Y	Chemiluminescent, BAM	3	2.5	1.5	EH79

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)
EH12 EH31 EH32	Hockerill St BS	Kerbside	549154	221242	NO_2	Y	0.9	1.4	No	2.5
EH17 EH35 EH36	Dunmow Rd	Kerbside	549364	221215	NO_2	Y	7.4	1.8	No	2.5

EH18 EH37 EH38	Stanstead Rd	Kerbside	549298	221313	NO_2	N	2.7	1.4	No	2.5
EH19 EH39 EH40	London Rd	Kerbside	549250	221200	NO_2	N	0.4	1.1	No	2.5
EH25	Old Cross Hertford	Kerbside	532446	212669	NO_2	y	3.1	0.9	No	2.5
EH28 EH48 EH49	Castle Street Hertford	Roadside	532542	212370	NO_2	Y	12.5	2.4	No	2.5
EH42 EH43 EH44	West St Hertford colocated with EH29	Roadside	532408	212371	NO_2	Y	4.8	2.8	No	2.5
EH79 EH80 EH81	Gascoyne Way, Hertford	Roadside	532464	212338	NO_2	Y	3	2.5	Yes	2.5
EH30	Downey CottageHertingfordbury RdHertford	Kerbside	532023	212550	NO_2	Y	1.8	0.5	No	2.5
EH41	Ware Rd Hertford	Roadside	533101	212755	NO_2	Y	2.1	1.1	No	2.5
EH52	Cowbridge Hertford	Roadside	532307	212814	NO_2	Y	1.5	3.2	No	2.5
EH53	Viaduct Road Ware	Roadside	536068	214120	NO_2	y	3.1	1.8	No	2.5
EH54	Station Road Ware	Roadside	536085	214077	NO_2	N	20.7	1.8	No	2.5
EH57	Opp Bell St SBW at crossing	Roadside	548123	214903	NO_2	N	0.6	2.8	No	2.5
EH62	Northgate End B/S Jct Yew Tree Court	Roadside	548723	221719	NO_2	N	6.0	2.5	No	2.5
EH64	Rye St, B/S outside 79	Roadside	548741	222109	NO_2	N	3.6	1.5	No	2.5
EH66	221 Rye Street Bishops Stortford	Roadside	549134	222676	NO_2	N	0	1.5	No	2.5
EH68	Hadham Rd, B/S outside 9	Roadside	548611	221541	NO_2	N	0.5	1.5	No	2.5
EH70	Outside 38 High St, Buntingford.	Roadside	536205	229558	NO_2	N	0	1.5	No	2.5
EH73	opp Horseshoe Cott's, Buntingford	Roadside	536186	229430	NO_2	N	0	1.5	No	2.5

EH82	10 Bullocks Lane, Hertford	Roadside	532186	211739	NO_2	Y	0	1.5	No	2.5
EH83	Port Hill Hertford	Roadside	532355	213032	NO_2	N	0	1.5	No	2.5
EH84	North Road, Hertford	Roadside	532113	212604	NO_2	N	0	1.5	No	2.5
EH85	Sele House North Road, Hertford	Roadside	531911	212711	NO_2	N	0	1.5	No	2.5
EH86	78 North Road, Hertford	Roadside	531577	213073	NO_2	N	0	1.5	No	2.5
EH87	Viaduct Road, Ware	Roadside	536060	214128	NO_2	N	0	1.5	No	2.5
EH88	Santander High Street, Ware	Roadside	535793	214312	NO_2	N	0	1.5	No	2.5
EH89	Coffee Lab, 84-88 High Street, Ware	Roadside	535743	214348	NO_2	N	0	1.5	No	2.5
EH90	Pye Corner, Gilston	Roadside	544885	212254	NO_2	N	0	1.5	No	2.5
EH91	14 London Road, SBW	Roadside	548012	214579	NO_2	Y	0	1.5	No	2.5
EH92	Gourmet Oriental, South Street, B/S	Roadside	548865	220981	NO_2	N	0	1.5	No	2.5
EH93	Stortford Flooring, 4 Station Road B/S	Roadside	548904	221020	NO_2	N	0	1.5	No	2.5
EH94	Cancer Research (now empty), Potter Street,B/S	Roadside	548778	221308	NO_2	N	0	1.5	No	2.5
EH95	Stortford Road, Little Hadham	Roadside	543996	222731	NO_2	N	0	1.5	No	2.5
EH96	Standon Road, Little Hadham	Roadside	543944	222725	NO_2	N	0.0	1.5	No	2.5

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
EH79	532464	212338	Roadside	99.83	99.83	20	26	28.9	25	22

☒ **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 (%)	2020	2021	2022	2023	2024
EH25	532446	212669	Kerbside	32.1	32.1	33.1	32.3	32.0	30.3	36.9
EH30	532023	212550	Kerbside	66.0	66.0	31.3	30.0	33.3	29.5	30.0
EH12, EH31, EH32	549154	221242	Kerbside	66.0	66.0	34.5	33.4	38.9	33.9	31.9
EH17, EH35, EH36	549364	221215	Kerbside	66.0	66.0	**46.9**	**47.3**	**48.8**	39.5	34.1
EH18, EH37, EH38	549298	221313	Kerbside	66.0	66.0	30.8	30.7	33.1	30.7	29.2
EH19, EH39, EH40	549250	221200	Kerbside	66.0	66.0	**48.9**	**48.3**	**50.0**	**44.2**	**41.1**
EH41	533101	212755	Roadside	66.0	66.0	32.2	31.6	36.1	31.5	30.0
EH42, EH43, EH44	532408	212371	Roadside	32.1	32.1	31.8	32.1	36.8	30.6	32.8
EH28, EH48, EH49	532542	212370	Roadside	66.0	66.0	28.0	28.1	31.8	27.4	25.4
EH52	532307	212814	Roadside	66.0	66.0	22.5	20.0	23.7	20.6	19.7
EH54	536085	214077	Roadside	66.0	66.0	20.3	19.5	24.2	20.5	18.3
EH57	548123	214903	Roadside	66.0	66.0	**40.5**	**40.9**	**42.9**	37.8	35.7
EH62	548723	221719	Roadside	41.5	41.5	24.4	25.4	29.3	24.4	23.3
EH64	548741	222109	Roadside	66.0	66.0	22.7	21.6	24.9	22.1	22.5
EH66	549134	222676	Roadside	49.1	49.1	14.8	14.1	17.1	15.9	17.7
EH68	548611	221541	Roadside	66.0	66.0	24.2	23.9	27.4	23.5	23.0
EH70	536205	229558	Roadside	66.0	66.0	18.9	18.2	20.7	17.2	16.7
EH73	536186	229430	Roadside	58.5	58.5	23.2	22.5	25.8	24.1	21.5
EH79, EH80, EH81	532464	212338	Roadside	66.0	66.0	25.6	26.1	28.9	24.9	23.6
EH82	532186	211739	Roadside	66.0	66.0	22.5	22.5	26.2	22.4	21.7
EH83	532309	212820	Roadside	66.0	66.0	21.4	19.5	21.4	18.5	17.1
EH84	531577	213073	Roadside	66.0	66.0	25.9	23.7	25.9	22.8	33.8
EH85	531911	212711	Roadside	66.0	66.0	30.2	31.5	37.3	33.8	18.0
EH87	536060	214128	Roadside	66.0	66.0	30.1	31.1	33.3	28.8	24.0
EH88	535793	214312	Roadside	66.0	66.0	24.9	25.8	32.6	29.9	28.9

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 (%)	2020	2021	2022	2023	2024
EH89	535743	214348	Roadside	56.6	56.6	21.3	21.7	26.3	22.5	23.7
EH90	531184	211869	Roadside	66.0	66.0	20.3	17.6	22.0	18.9	17.8
EH91	548012	214579	Roadside	66.0	66.0	32.7	33.6	37.3	31.9	30.1
EH92	548865	220981	Roadside	58.5	58.5	23.1	22.1	24.6	21.3	20.2
EH93	548904	221020	Roadside	66.0	66.0	30.3	27.1	33.2	31.0	30.0
EH94	548778	221308	Roadside	66.0	66.0	22.9	23.3	28.3	25.7	25.1
EH95	543996	222731	Roadside	66.0	66.0	17.2	18.7	17.2	14.6	14.2
EH96	543944	222725	Roadside	66.0	66.0	19.8	16.9	15.3	13.1	12.2

☒ **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**.

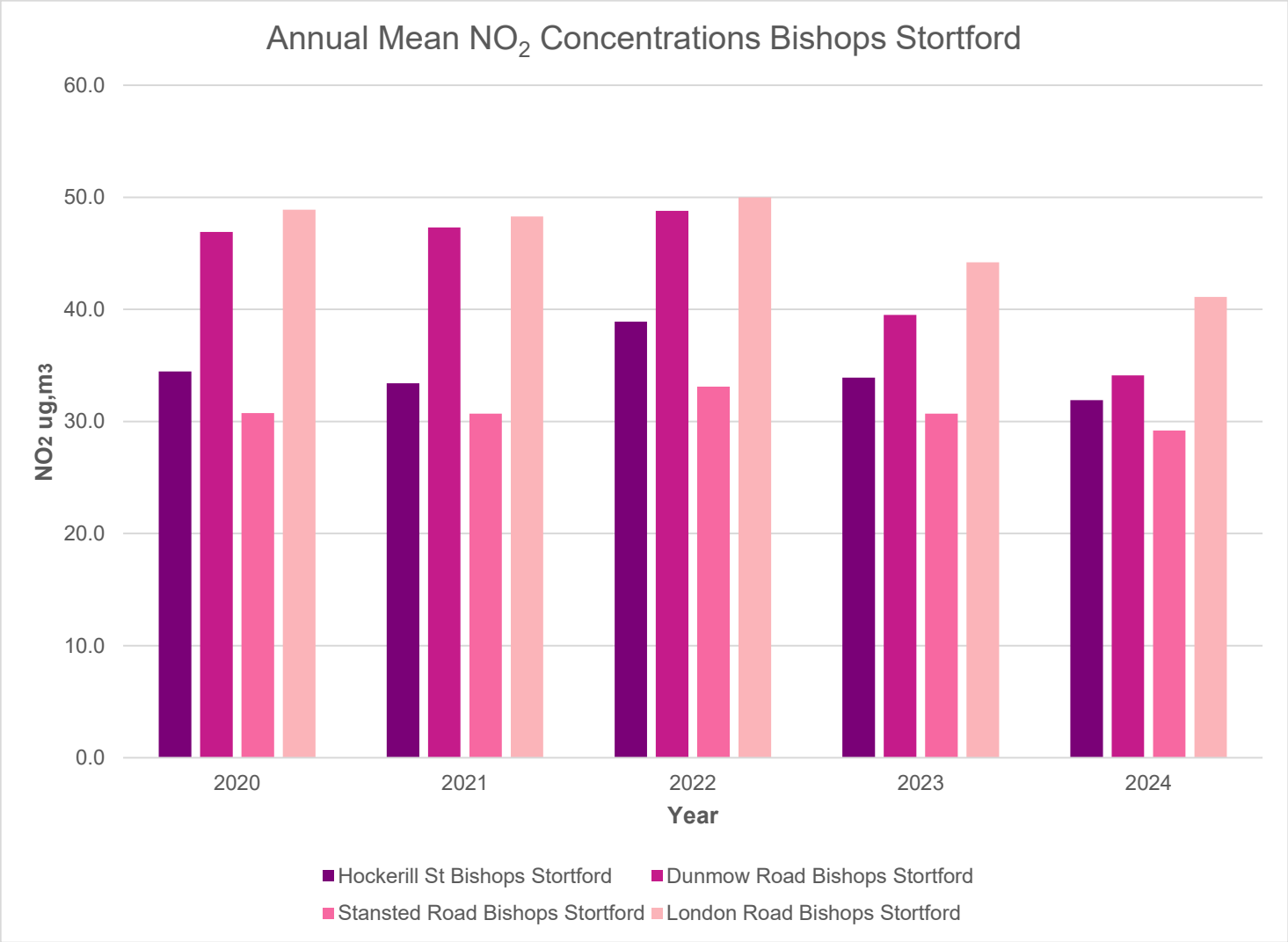
Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

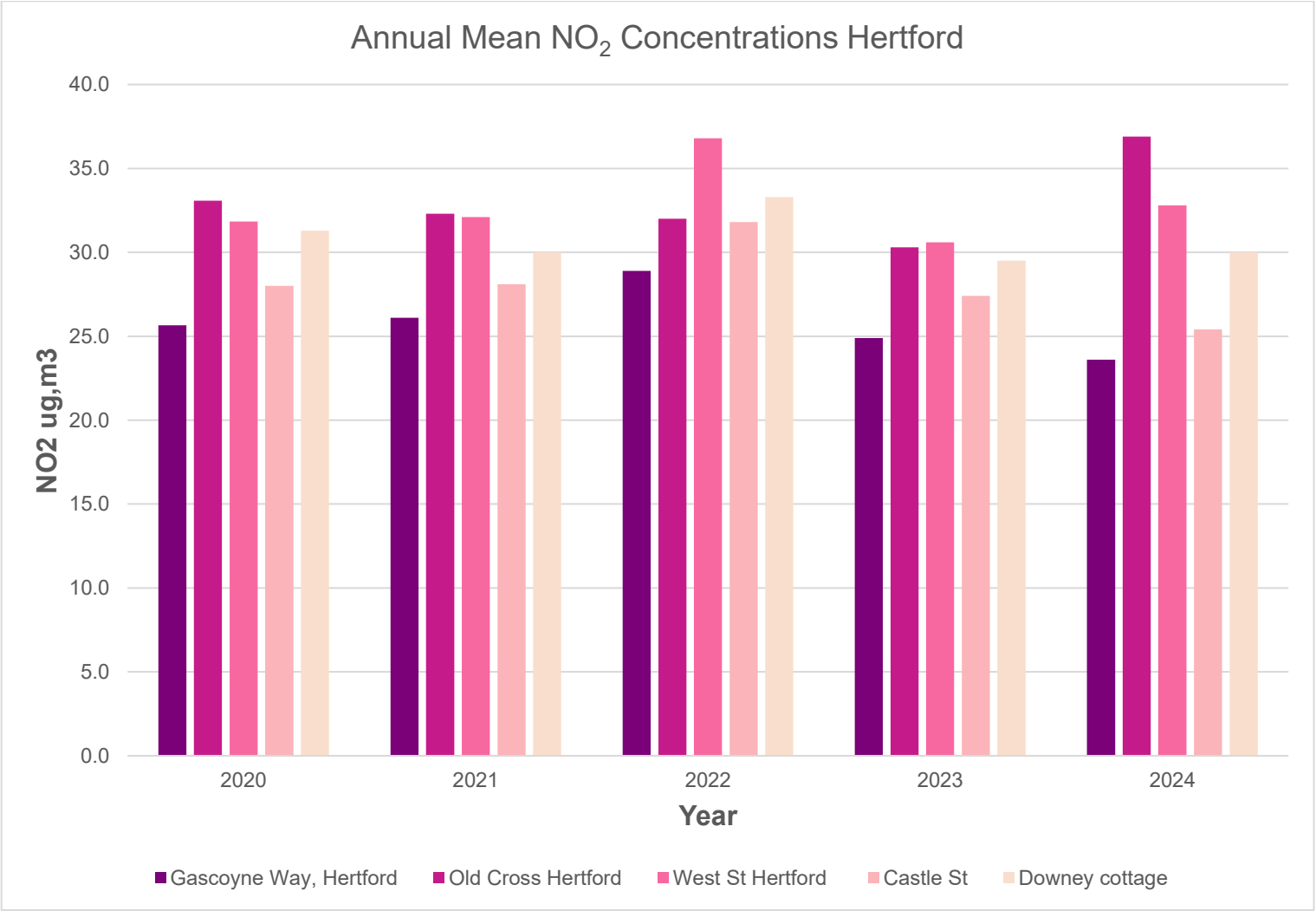
Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(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




Annual Mean NO2 Concentrations Hertford
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
NO2 ug,m3
2020
2021
2022
2023
2024
Year
Gascoyne Way, Hertford
Old Cross Hertford
West St Hertford
Castle St
Downey cottage

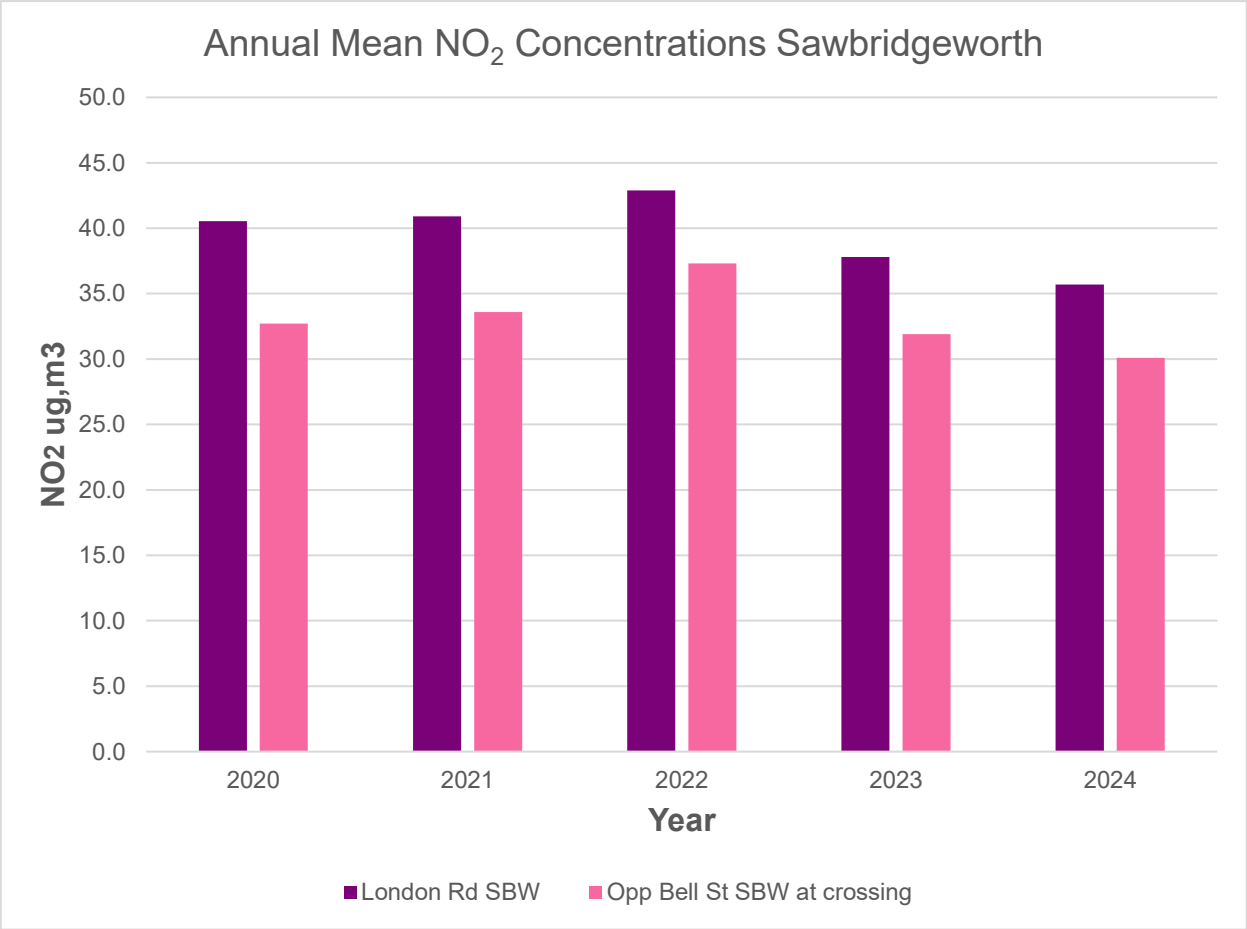

Annual Mean NO2 Concentrations Sawbridgeworth
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
NO2 ug,m3
2020
2021
2022
2023
2024
Year
London Rd SBW
Opp Bell St SBW at crossing

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
EH79	532464	212338	Roadside	99.83	99.83	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 $PM_{2.5}$ 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
EH79	532464	212338	Roadside	95.35	95.25	10.6	12	12	8	8

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

Notes:

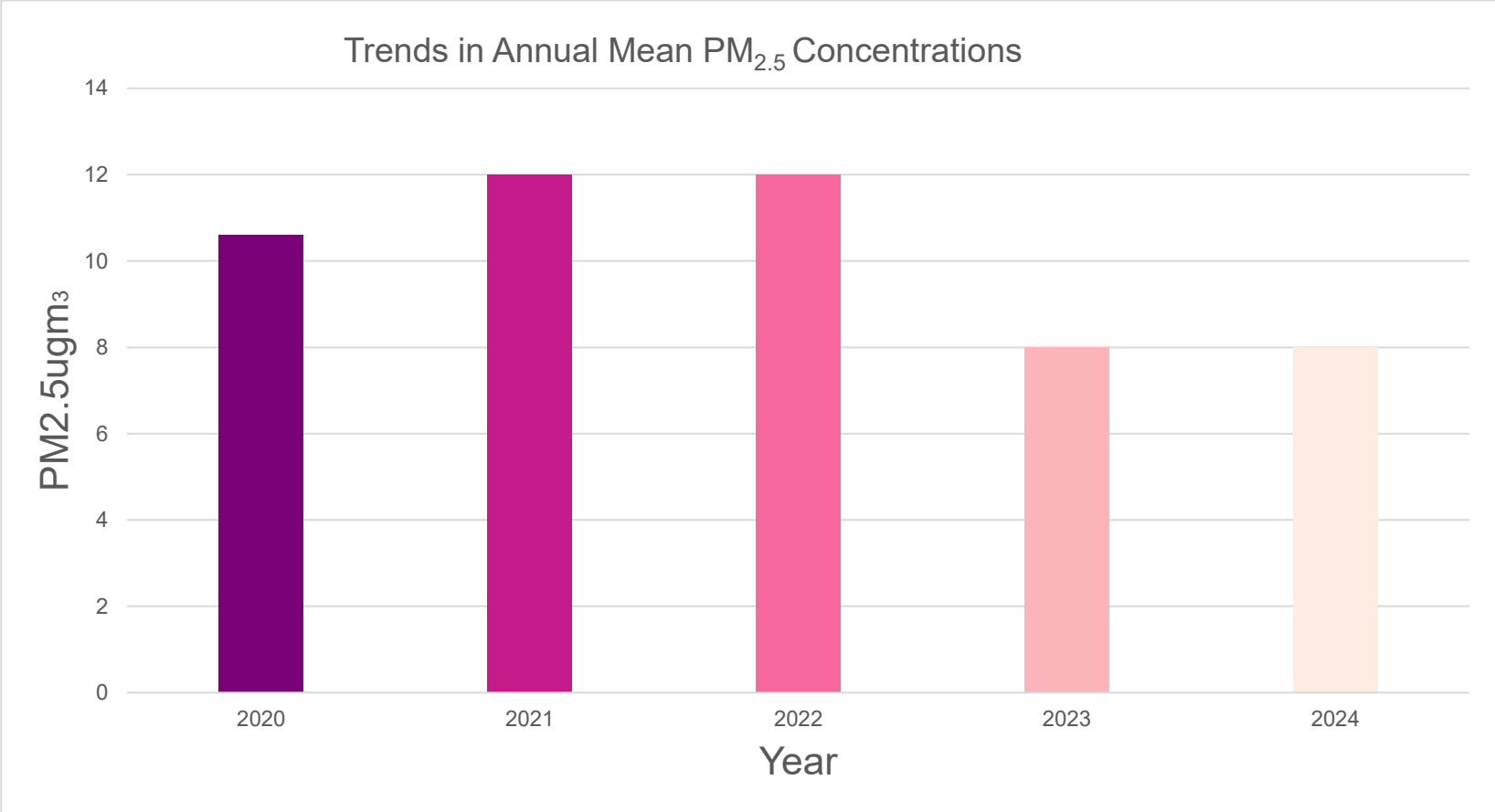
The annual mean concentrations are presented as $\mu g/m^3$.

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.2 – Trends in Annual Mean $PM_{2.5}$ Concentrations



Appendix B: Full Monthly Diffusion Tube Results for 2024

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

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted <(x.x)>	Annual Mean: Distance Corrected to Nearest Exposure	Comment
EH12	549154	221242	29.0	34.0	34.0	25.0	27.0	27.0	29.0	24.0					-	-	-	Triplicate Site with EH12, EH31 and EH32 - Annual data provided for EH32 only
EH17	549364	221215	33.0	31.0	28.0	30.0	28.0	28.0	31.0	32.0					-	-	-	Triplicate Site with EH17, EH35 and EH36 - Annual data provided for EH36 only
EH18	549298	221313	1.0	28.0	28.0	26.0	27.0	27.0	27.0	23.0					-	-	-	Triplicate Site with EH18, EH37 and EH38 - Annual data provided for EH38 only
EH19	549250	221200	39.0	37.0	34.0	37.0	36.0	36.0	40.0	38.0					-	-	-	Triplicate Site with EH19, EH39 and EH40 - Annual data provided for EH40 only
EH25	532446	212669	30.0	30.0	26.0	25.0									27.9	**45.2**	36.9	
EH28	532542	212370	24.0	23.0	26.0	21.0	22.0	22.0	19.0	20.0					-	-	-	Triplicate Site with EH28, EH48 and EH49 - Annual data provided for EH49 only
EH30	532023	212550	28.0	26.0	27.0	24.0	25.0	25.0	34.0	24.0					26.5	30.0	-	
EH31	549154	221242	29.0	33.0	33.0	25.0	26.0	26.0	27.0	29.0					-	-	-	Triplicate Site with EH12, EH31 and EH32 - Annual data provided for EH32 only
EH32	549154	221242	29.0	29.0	33.0	24.0	25.0	25.0	25.0	28.0					28.1	31.9	-	Triplicate Site with EH12, EH31 and EH32 - Annual data provided for EH32 only
EH35	549364	221215	34.0	30.0		29.0			32.0	34.0					-	-	-	Triplicate Site with EH17, EH35 and EH36 - Annual data provided for EH36 only
EH36	549364	221215	34.0	32.0	29.0		26.0	26.0	32.0	31.0					30.1	34.1	-	Triplicate Site with EH17, EH35 and EH36 - Annual data provided for EH36 only
EH37	549298	221313	31.0	31.0	26.0	26.0	26.0	26.0	26.0	22.0					-	-	-	Triplicate Site with EH18, EH37 and EH38 - Annual data provided for EH38 only
EH38	549298	221313	31.0	29.0	29.0	25.0	26.0	26.0	25.0	24.0					25.7	29.2	-	Triplicate Site with EH18, EH37 and EH38 - Annual data provided for EH38 only
EH39	549250	221200	42.0	39.0	37.0	38.0	37.0	38.0	41.0	36.0					-	-	-	Triplicate Site with EH19, EH39 and EH40 - Annual data provided for EH40 only
EH40	549250	221200	41.0	37.0	36.0	36.0	38.0	38.0	39.0	37.0					37.7	**42.8**	**41.1**	Triplicate Site with EH19, EH39 and EH40 - Annual data provided for EH40 only
EH41	533101	212755	30.0	30.0	31.0	23.0	25.0	25.0	24.0	24.0					26.5	30.0	-	
EH42	532408	212371	26.0	24.0	26.0	25.0									-	-	-	Triplicate Site with EH42, EH43 and EH44 - Annual data provided for EH44 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 <(x.x)>	Annual Mean: Distance Corrected to Nearest Exposure	Comment
EH43	532408	212371	29.0	26.0	27.0	26.0									-	-	-	Triplicate Site with EH42, EH43 and EH44 - Annual data provided for EH44 only
EH44	532408	212371	28.0	26.0	26.0	24.0									26.0	**42.2**	32.8	Triplicate Site with EH42, EH43 and EH44 - Annual data provided for EH44 only
EH48	532542	212370	24.0	22.0	26.0	21.0	23.0	23.0	19.0	21.0					-	-	-	Triplicate Site with EH28, EH48 and EH49 - Annual data provided for EH49 only
EH49	532542	212370	24.0	24.0	26.0	21.0	23.0	23.0	19.0	22.0					22.4	25.4	-	Triplicate Site with EH28, EH48 and EH49 - Annual data provided for EH49 only
EH52	532307	212814	23.0	21.0	20.0	15.0	16.0	16.0	13.0	15.0					17.4	19.7	-	
EH54	536085	214077	23.0	21.0	18.0	14.0	13.0	13.0	13.0	14.0					16.1	18.3	-	
EH57	548123	214903	36.0	36.0	35.0	34.0	30.0	30.0	33.0	33.0					33.3	37.8	35.7	
EH62	548723	221719	24.0	27.0	22.0				17.0	16.0					21.2	23.3	-	
EH64	548741	222109	29.0	23.0	20.0	17.0	19.0	19.0	17.0	15.0					19.8	22.5	-	
EH66	549134	222676	19.0	18.0	18.0	12.0			11.0	15.0					15.6	17.7	-	
EH68	548611	221541	25.0	24.0	22.0	17.0	19.0	19.0	17.0	19.0					20.3	23.0	-	
EH70	536205	229558	21.0	19.0	16.0	13.0	13.0	13.0	10.0	13.0					14.8	16.7	-	
EH73	536186	229430	26.0	21.0	19.0	16.0	17.0		17.0	17.0					18.9	21.5	-	
EH79	532464	212338	24.0	22.0	23.0	18.0	22.0	22.0	17.0	18.0					-	-	-	Triplicate Site with EH79, EH80 and EH81 - Annual data provided for EH81 only
EH80	532464	212338	24.0	22.0	23.0	18.0	23.0	23.0	17.0	18.0					-	-	-	Triplicate Site with EH79, EH80 and EH81 - Annual data provided for EH81 only
EH81	532464	212338	25.0	21.0	23.0	18.0	23.0	23.0	15.0	18.0					20.8	23.6	-	Triplicate Site with EH79, EH80 and EH81 - Annual data provided for EH81 only
EH82	532186	211739	23.0	21.0	21.0	15.0	19.0	19.0	17.0	18.0					19.1	21.7	-	
EH83	532309	212820	24.0	20.0	17.0	13.0	12.0	12.0	11.0	12.0					15.1	17.1	-	
EH84	531577	213073	24.0	24.0	21.0	15.0	17.0	17.0	15.0	18.0					18.9	21.5	-	
EH85	531911	212711	33.0	31.0	28.0	28.0	31.0	31.0	31.0	26.0					29.8	33.8	-	
EH86	531577	213073	22.0	21.0	19.0	13.0	13.0	13.0	12.0	14.0					15.9	18.0	-	
EH87	536060	214128	28.0	26.0	25.0	21.0	12.0	12.0	22.0	24.0					21.2	24.0	-	
EH88	535793	214312	31.0	27.0	26.0	23.0	23.0	23.0	25.0	26.0					25.5	28.9	-	
EH89	535743	214348	25.0	21.0	20.0	18.0	18.0	18.0	16.0						19.4	23.7	-	
EH90	531184	211869	21.0	19.0	16.0	13.0	14.0	14.0	13.0	15.0					15.7	17.8	-	
EH91	548012	214579	30.0	28.0	23.0	25.0	27.0	27.0	26.0	26.0					26.5	30.1	-	
EH92	548865	220981	23.0	22.0	21.0		16.0	16.0	15.0	16.0					18.4	20.2	-	

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 <(x.x)>	Annual Mean: Distance Corrected to Nearest Exposure	Comment
EH93	548904	221020	28.0	33.0	30.0	24.0	23.0	23.0	24.0	26.0					26.5	30.0	-	
EH94	548778	221308	27.0	26.0	23.0	20.0	20.0	20.0	21.0	20.0					22.1	25.1	-	
EH95	543996	222731	17.0	14.0	13.0	11.0	12.0	12.0	10.0	11.0					12.5	14.2	-	
EH96	543944	222725	16.0	15.0	14.0	9.0	7.0	7.0	8.0	10.0					10.7	12.2	-	

☒ **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**

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

Notes:

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

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

See Appendix C for details on bias adjustment and annualisation.

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

New or Changed Sources Identified Within East Hertfordshire District Council District Council During 2024

East Hertfordshire District Council District Council has not identified any new sources relating to air quality within the reporting year of 2024

QA/QC of Diffusion Tube Monitoring

Diffusion tubes for NO_2 in East Hertfordshire are provided by Gradko International Ltd, using a preparation method of 50% Triethanolamine (TEA) in acetone.

Gradko participate in the AIR-PT scheme. AIR is an independent analytical proficiency-testing (PT) scheme, operated by LGC Standards and supported by the Health and Safety Laboratory (HSL). The AIR-PT scheme started in April 2014, combining two long running PT schemes: LGC Standards STACKS PT scheme and HSL WASP PT scheme.

AIR NO_2 PT forms an integral part of the UK NO_2 Network's QA/QC, and is a useful tool in assessing the analytical performance of those laboratories supplying diffusion tubes to Local Authorities for use in the context of Local Air Quality Management (LAQM). Defra and the

Devolved Administrations advise that diffusion tubes used for LAQM should be obtained from laboratories that have demonstrated satisfactory performance in the AIR-PT scheme.

The AIR PT scheme tests laboratories' analytical performance on a quarterly basis. The percentage of results submitted by Gradko International Ltd that were subsequently determined to be satisfactory as per the following AIR PT rounds in 2024:

- 062 (January – February 2024) 100%
- 063)April - June 2024) 100%

Gradko participates in the AIR proficiency testing (PT) scheme operated by LGC Standards and supported by the Health and Safety Laboratory (HSL), which provides a Quality Assurance/Quality Control (QA/QC) framework for local authorities carrying out diffusion tube monitoring as a part of their local air quality management process.

Diffusion Tube Annualisation

Annualisation was required for all of our non automatic data sites, due to less than 75% data capture across all sites. This was completes using the diffusion tube data processing tool, the table from which is included below.

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

Site ID	Annualisation Factor <Site 1 Gascoyne Way	Annualisation Factor <Site 2 Boreham Wood Meadow Park	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean	
EH12	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH12, EH31 and EH32 - Annual data provided for EH32 only*
EH17	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH17, EH35 and EH36 - Annual data provided for EH36 only*
EH18	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH18, EH37 and EH38 - Annual data provided for EH38 only*
EH19	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH19, EH39 and EH40 - Annual data provided for EH40 only*
EH25	2.7619	0.9195	1.8407	27.9	51.3	
EH28	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH28, EH48 and EH49 - Annual data provided for EH49 only*
EH30	1.4475	1.1294	1.2885	26.5	34.1	
EH31	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH12, EH31 and EH32 - Annual data provided for EH32 only*
EH32	1.4475	1.1294	1.2885	28.1	36.3	*Triplicate Site with EH12, EH31 and EH32 - Annual data*

Site ID	Annualisation Factor <Site 1 Gascoyne Way	Annualisation Factor <Site 2 Boreham Wood Meadow Park	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean	
						provided for EH32 only
EH35	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH17, EH35 and EH36 - Annual data provided for EH36 only*
EH36	1.4475	1.1294	1.2885	30.1	38.8	*Triplicate Site with EH17, EH35 and EH36 - Annual data provided for EH36 only*
EH37	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH18, EH37 and EH38 - Annual data provided for EH38 only*
EH38	1.4475	1.1294	1.2885	25.7	33.1	*Triplicate Site with EH18, EH37 and EH38 - Annual data provided for EH38 only*
EH39	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH19, EH39 and EH40 - Annual data provided for EH40 only*
EH40	1.4475	1.1294	1.2885	37.7	48.6	*Triplicate Site with EH19, EH39 and EH40 - Annual data provided for EH40 only*
EH41	1.4475	1.1294	1.2885	26.5	34.1	
EH42	2.7619	0.9195	1.8407	-	-	*Triplicate Site with EH42, EH43 and EH44 - Annual data*

Site ID	Annualisation Factor <Site 1 Gascoyne Way	Annualisation Factor <Site 2 Boreham Wood Meadow Park	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean	
						provided for EH44 only
EH43	2.7619	0.9195	1.8407	-	-	*Triplicate Site with EH42, EH43 and EH44 - Annual data provided for EH44 only*
EH44	2.7619	0.9195	1.8407	26.0	47.9	*Triplicate Site with EH42, EH43 and EH44 - Annual data provided for EH44 only*
EH48	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH28, EH48 and EH49 - Annual data provided for EH49 only*
EH49	1.4475	1.1294	1.2885	22.4	28.9	*Triplicate Site with EH28, EH48 and EH49 - Annual data provided for EH49 only*
EH52	1.4475	1.1294	1.2885	17.4	22.4	
EH54	1.4475	1.1294	1.2885	16.1	20.8	
EH57	1.4475	1.1294	1.2885	33.3	43.0	
EH62	1.5441	0.9479	1.2460	21.2	26.4	
EH64	1.4475	1.1294	1.2885	19.8	25.5	
EH66	1.5619	1.0223	1.2921	15.6	20.1	
EH68	1.4475	1.1294	1.2885	20.3	26.1	
EH70	1.4475	1.1294	1.2885	14.8	19.0	
EH73	1.5147	1.0718	1.2933	18.9	24.5	
EH79	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH79, EH80 and EH81 - Annual data provided for EH81 only*

Site ID	Annualisation Factor <Site 1 Gascoyne Way	Annualisation Factor <Site 2 Boreham Wood Meadow Park	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean	
EH80	1.4475	1.1294	1.2885	-	-	*Triplicate Site with EH79, EH80 and EH81 - Annual data provided for EH81 only*
EH81	1.4475	1.1294	1.2885	20.8	26.8	*Triplicate Site with EH79, EH80 and EH81 - Annual data provided for EH81 only*

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.

East Hertfordshire District Council have applied a national bias adjustment factor of 0.88 to the 2024 monitoring data. A summary of bias adjustment factors used by East Hertfordshire District Council over the past five years is presented in Table C.2.

The national bias adjustment factor has been used this time which is a deviation from the pattern of using the local factor, this is due to not having sufficient data capture of the co located diffusion tubes to enable calculation of a local factor.

Table C.2 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	September 2025	0.88
2023	Local		1.04
2022	Local		1.08
2021	Local		0.96
2020	Local		1.03

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.

QA/QC of Automatic Monitoring

LSO duties within East Hertfordshire District Council are carried out by LA officers, with calibrations taking place every 4 weeks. Ricardo has developed highly sophisticated state of the art air quality data management software, MODUS. The MODUS software is used to collect, check, scale, validate and ratify air quality data sets. It is proven in service and currently delivers ratified data in a cost-effective manner for all AURN sites.

Live air quality data is available through the Herts and Beds section of the Air Quality England website: Hertfordshire and Bedfordshire - Air Quality monitoring service (airqualityengland.co.uk)

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

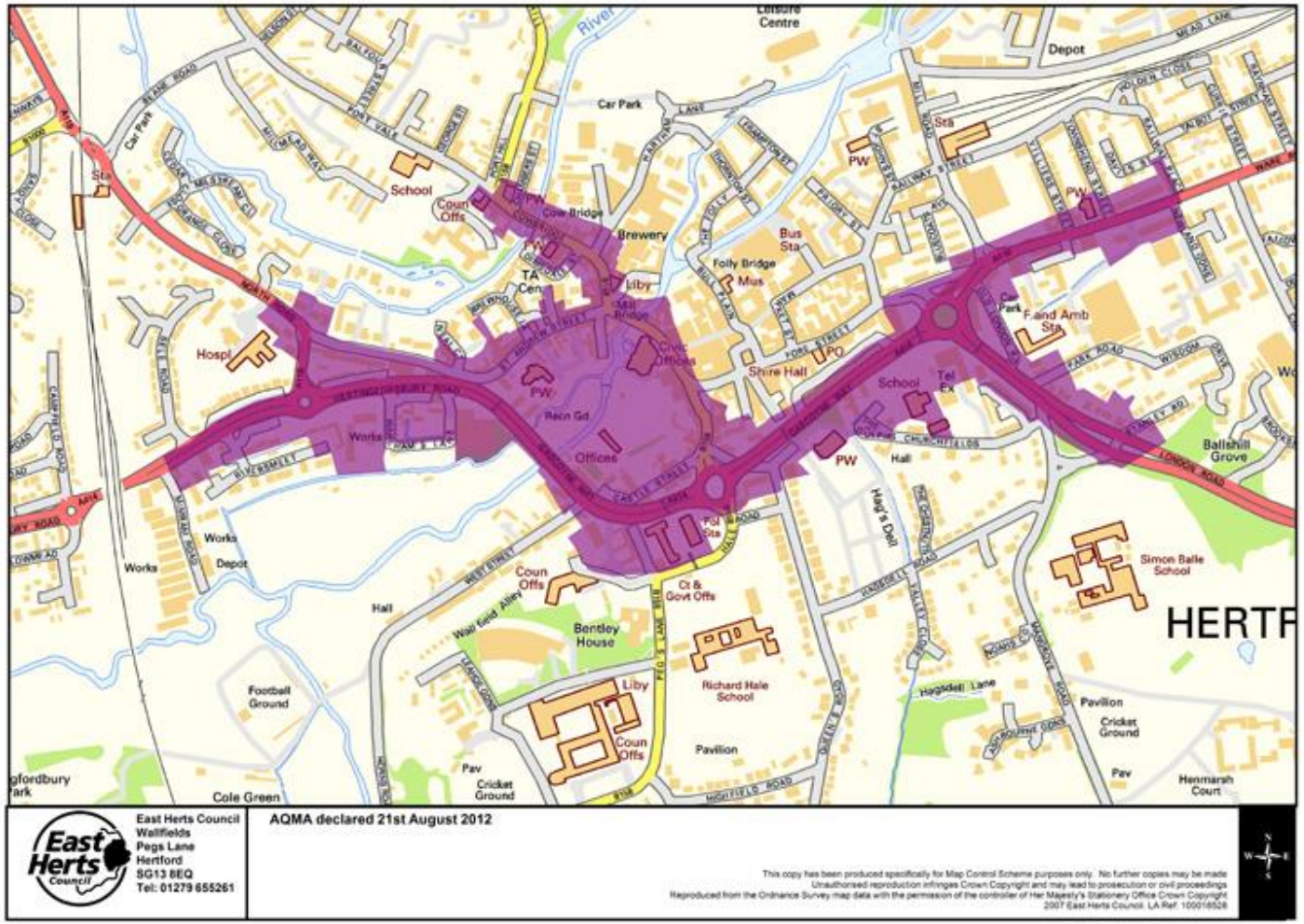
The type of $PM_{2.5}$ monitor utilised within East Hertfordshire District Council District Council do not required the application of a correction factor. East Hertfordshire District Council District Council does not currently monitor PM_{10}.

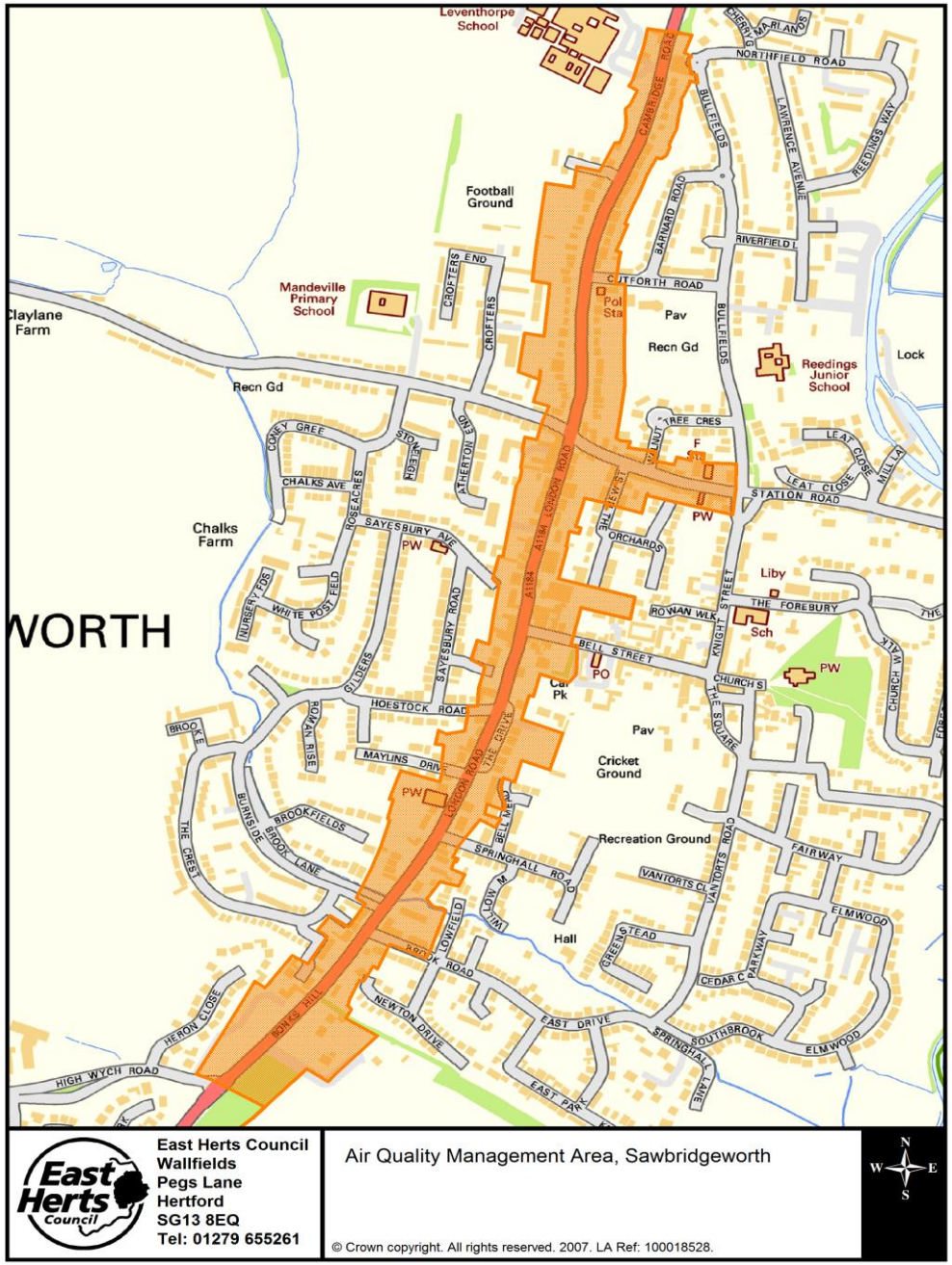
NO_2 Fall-off with Distance from the Road

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

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

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




Leventhorpe School
Football Ground
Mandeville Primary School
Claylane Farm
Recn Gd
Chalks Farm
WORTH
Pol Sta
Pav
Recn Gd
Reedings Junior School
Lock
Liby
Sch
PO
Pav
Cricket Ground
Recreation Ground
Hall
PW
NORTHFIELD ROAD
BULLFIELDS
LAWRENCE AVENUE
REEDINGS WAY
BARNARD ROAD
RIVERFIELD
CUTFORTH ROAD
CROFTERS END
CROFTERS
CHALKS AVE
ROSEACRES
SAYESBURY AVE
SAYESBURY ROAD
NURSERY FDS
WHITE POST FIELD
GLIDERS
HOESTOCK ROAD
MAYLINS DRN
BROOKSIDE
BROOKFIELDS
BURNSIDE
BROOK LANE
THE CREST
HOWARDS RISE
LONDON ROAD
THE GROVE
BELL MEAD
SPRINGHALL ROAD
LOWFIELD
BROOK ROAD
BOWES HILL
NEWTON DRIVE
HERON CLOSE
HIGH WYCH ROAD
EAST DRIVE
EAST PARK
SPRINGHALL LANE
SOUTHBROOK
ELMWOOD
CEDAR CL
PARKWAY
GREENSTEAD
VANTORTS ROAD
FAIRWAY
CHURCH WALK
THE SQUARE
CHURCH ST
BELL STREET
ROWAN WLK
KNIGHT STREET
THE FOREBURY
ORCHARDS
THE NEW ST
STATION ROAD
LEAT CLOSE
MILLAI
TREE CRES
ATHERTON END
HOSTEL
A1184 LONDON ROAD
CAMBRIDGE ROAD
DERWENT MARLANDS
Car Pk
F
East Herts Council
Wallfields
Pegs Lane
Hertford
SG13 8EQ
Tel: 01279 655261
Air Quality Management Area, Sawbridgeworth
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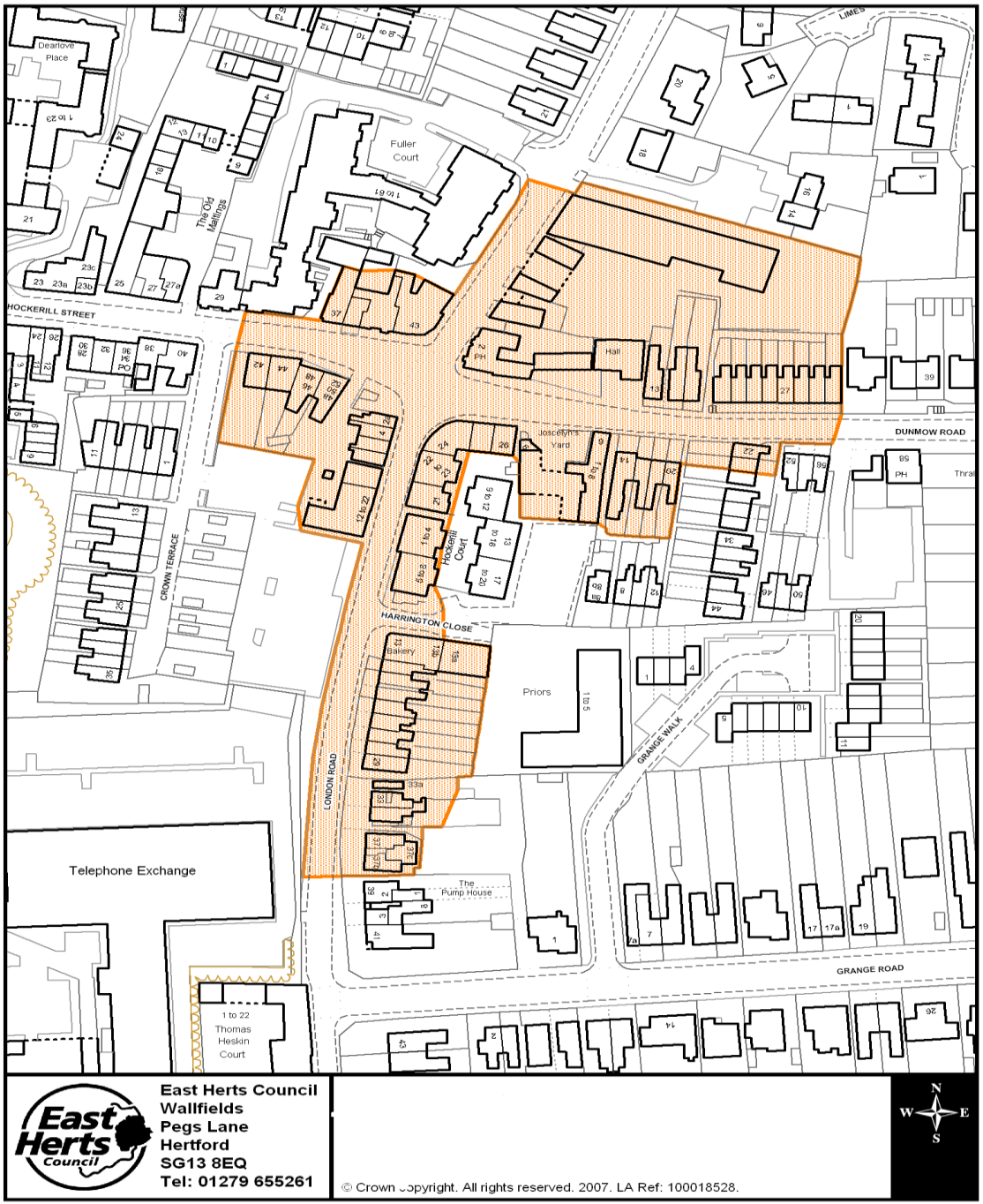
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Fuller Court
The Old Maltings
HOCKERILL STREET
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Bakery
Priors
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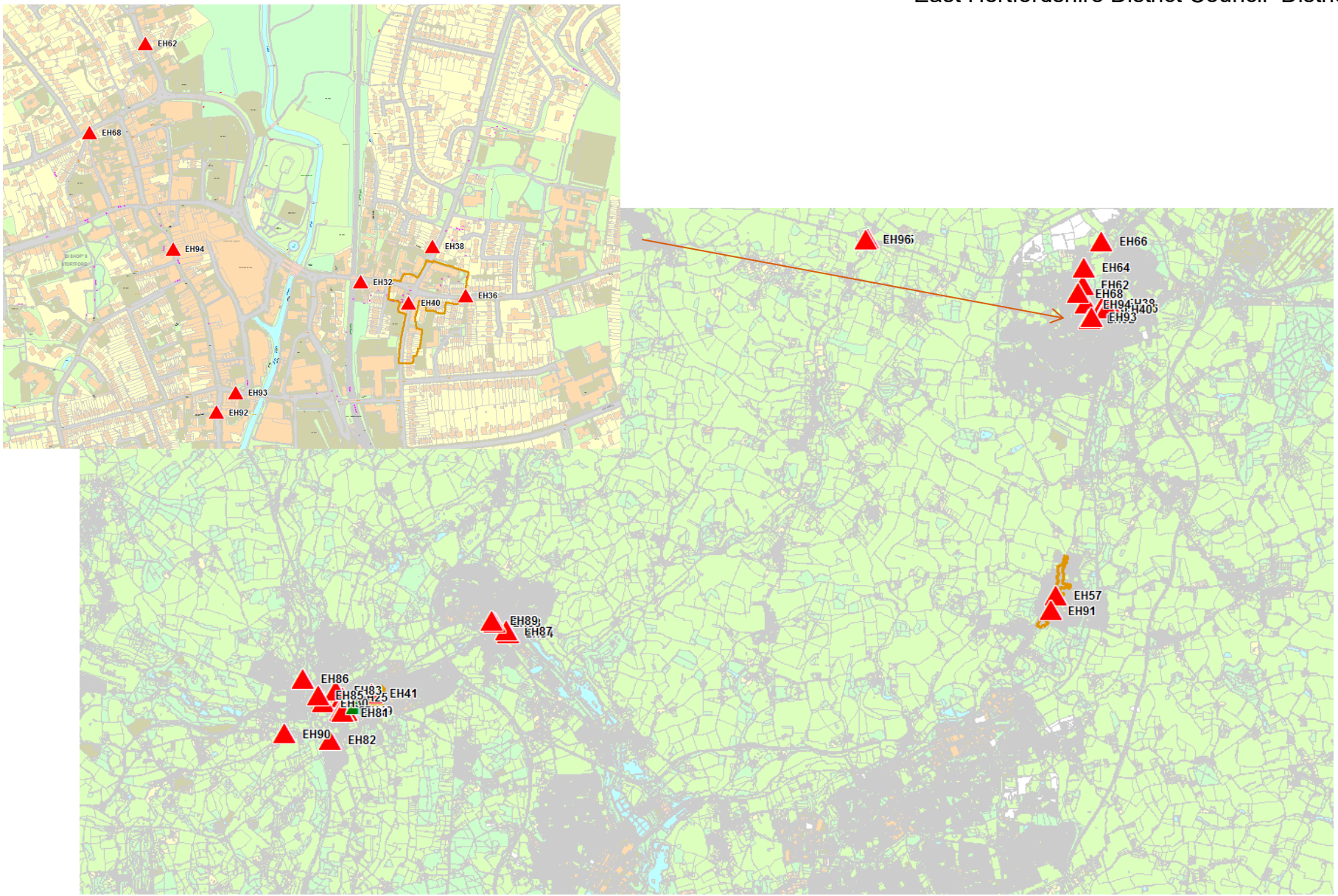

Map showing all current diffusion tubes (in red), our automatic monitoring station (green) and also the three Air Quality Management Areas (Brown/orange).

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England[6]

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

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

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
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.