

Working together for Harlow

2024 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: April 2024

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Executive Summary: Air Quality in Our Area

The 2024 Annual Status Report (ASR) is designed to provide the public with information relating to local air quality in Harlow, to fulfil Harlow Council's statutory duty to review and assess air quality within its area, and to determine whether or not the air quality objectives are likely to be achieved.

In 2023, Harlow Council measured **no** exceedances of the Air Quality Objectives.

Air Quality in Harlow

Breathing in polluted air affects our health and costs the NHS and our society billions of pounds each year. Air pollution is recognised as a contributing factor in the onset of heart disease and cancer and can cause a range of health impacts, including effects on lung function, exacerbation of asthma, increases in hospital admissions and mortality. In the UK, it is estimated that the reduction in healthy life expectancy caused by air pollution is equivalent to 29,000 to 43,000 deaths a year¹.

Air pollution particularly affects the most vulnerable in society, children, the elderly, and those with existing heart and lung conditions. Additionally, people living in less affluent areas are most exposed to dangerous levels of air pollution².

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	Particulate matter is everything in the air that is not a gas.

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

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

(PM ₁₀ and PM _{2.5})	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.

Traffic emissions are the most significant source of air pollution in Harlow. The main roads in the District are the M11 and the A414. In addition, there a number of industrial processes. The majority of these are located in the two main industrial areas of the town: Templefields (to the north) and the Pinnacles (to the north west).

The Council recognises the importance of working with partnering Authorities such as with Essex County Council to make improvements to local transport infrastructure and also to fulfil its own regulatory responsibility towards industrial processes.

Actions to Improve Air Quality

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

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

The Road to Zero⁵ details the Government's approach to reduce exhaust emissions from road transport through a number of mechanisms, in balance with the needs of the local community. This is extremely important given that cars are the most popular mode of personal travel and the majority of Air Quality Management Areas (AQMAs) are designated due to elevated concentrations heavily influenced by transport emissions.

³ Defra. Environmental Improvement Plan 2023, January 2023

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

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

Conclusions and Priorities

Harlow Council have concluded that:

- No air quality exceedances have been identified in 2022.
- There are no new developments that will have a significant impact on air quality.
- As set out in the LAQM Policy guidance, it is necessary for Harlow Council to develop and adopt an Air Quality Strategy (AQS).

Local Responsibilities and Commitment

This ASR was prepared by Public Health and Protection Services of Chelmsford City Council on behalf of Harlow Council

This ASR has been sent to the Director of Public Health at Essex County Council.

This ASR has been approved by:

Norah Nolan – Interim Assistant Director Environment, Harlow Council

If you have any comments on this ASR please send them to Norah Nolan 01279 446655

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Harlow Council

Civic Centre

The Water Gardens

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Local Engagement and How to get Involved

Harlow Council is a member of the Essex Air Quality consortium which along with Essex County Council launched the new Essex Air website on 28th November 2023 to raise awareness about air pollution in Essex. The website provides a pollution monitoring map and highlights simple actions that people can take to reduce emissions.

The website features a dedicated school zone with resources, activities, and games, an air pollution map, tips to reduce exposure to air pollution, and advice on changing travel habits to lessen exposure to pollution.

The @EssexAir feed provides localised weekly air pollution forecasts.

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1 Local Air Quality Management

This report provides an overview of air quality in Harlow during 2023. 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 Harlow 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.

Harlow Council currently does **not** have any declared AQMAs. A local Air Quality Strategy is under development to prevent and reduce polluting activities.

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

Defra's appraisal of last year's ASR concluded that report was well structured, detailed, and provides the information specified in the Technical Guidance.

Harlow Council have a number of ongoing measures to improve air quality in Harlow. These are detailed in Table 2.1 below.

Table 2.1 – 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	Defra AQ Grant Funding	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	Develop & Adopt a Local Air Quality Strategy (AQS)	Policy Guidance and Development Control	Other policy	2023	2026	Harlow Council	Harlow Council	NO	Not Funded	< £10k	Planning	Not quantified	Adoption of AQS		
2	Environmental Permit Inspection & Enforcement	Environmental Permits	Measures to reduce pollution through IPPC Permits going beyond BAT	N/A	Ongoing	Harlow Council	Harlow Council	NO	Funded	< £10k	Implementation	Not quantified	N/A	Ongoing	
3	Member of Essex Air	Policy Guidance and Development Control	Regional Groups Co- ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	N/A	Ongoing	County Council / District & Borough Councils	N/A	NO	Funded	< £10k	Implementation	Not quantified	N/A	Ongoing	
4	Essex Carshare	Alternatives to private vehicle use	Car & lift sharing schemes	2014	Ongoing	Essex County Council	Essex County Council	NO	Funded	< £10k	Implementation	Not quantified	N/A	Ongoing	
5	Harlow Sustainable Transport Corridors	Transport Planning and Infrastructure	Cycle network	2021	2025	Essex County Council Harlow District Council Harlow Town Park Users Group	Essex County Council	NO	Funded	£500k - £1 million	Planning	Not quantified	N/A	Initial designs & consultation completed. Advanced tree works on Harlow North to Centre Sustainable Transport Corridor Completed	

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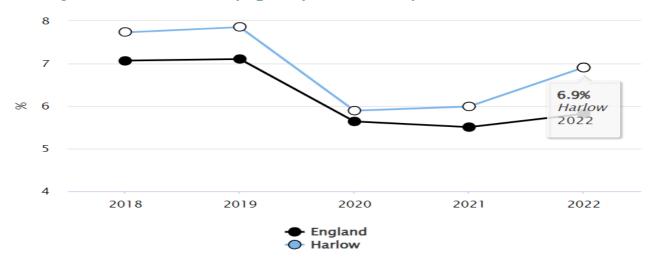
2.3 PM_{2.5} – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy⁶, local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter (PM_{2.5})). There is clear evidence that PM_{2.5} (particulate matter smaller 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Harlow Council does not monitor $PM_{2.5}$ concentrations however notes the Defra background mapping resource which for $PM_{2.5}$ in 2023 models a maximum annual mean concentration of $10.5 \mu g/m^3$ in the Local Authority area.

The Public Health Outcomes Framework indicator D01 – Fraction of mortality attributable to particulate (PM_{2.5}) air pollution which for 2022 gave a value of 6.9%.

Figure 2.1 – Public Health Framework Indicator D01 Fraction of all-cause adult mortality attributable to anthropogenic particulate air pollution



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

- Regular inspections of permitted industry where combustion and non-combustion processes could lead to anthropogenic emissions of PM_{2.5}
- Working with Essex County Council (highway authority) to deliver Major Transport improvement <u>schemes</u> to alleviate congestion. In addition to reduced exhaust emissions, these schemes will reduce non-exhaust emissions from brake and tyre wear by making traffic flows smoother.

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

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

This section sets out the monitoring undertaken within 2023 by Harlow Council and how it compares with the relevant air quality objectives. Monitoring results are presented for a five-year period between 2019 and 2023 to allow monitoring trends to be identified and discussed.

In 2023, Harlow Council measured **no** exceedances of the Air Quality Objectives.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

Harlow Council does not undertake automatic continuous monitoring.

3.1.2 Non-Automatic Monitoring Sites

Harlow Council undertook non-automatic (i.e. passive) monitoring of NO₂ at 13 sites during 2022 using diffusion tubes. Table A.1 in Appendix A presents the details of the non-automatic sites.

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

3.2 Individual Pollutants

3.2.1 Nitrogen Dioxide (NO₂)

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.

Table A.1 in Appendix A provides the details of the diffusion tube monitoring sites. Table A.2 compares the ratified and adjusted monitored NO₂ annual mean concentrations for the past five years with the air quality objective of 40μg/m³.

For diffusion tubes, the full 2023 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.

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)
HAR8	East Park	Suburban	546942	211186	NO2	No	11.0	23.2	No	2.0
HAR9	Gardiners	Urban	546888	209435	NO2	No	7.6	1.2	No	2.0
		Background								
HAR10	Dadds Wood	Urban	544434	209709	NO2	No	12.5	33.4	No	2.0
		Background								
HAR11	Town Centre	Kerbside	544680	210016	NO2	No	13.2	6.3	No	2.0
HAR13	Guilfords	Suburban	547524	212479	NO2	No	14.2	1.0	No	2.0
HAR16	Chalk Lane	Rural	549466	211598	NO2	No	14.0	1.5	No	2.0
HAR17	Rivermill	Kerbside	544297	210988	NO2	No	20.0	0.8	No	2.0
HAR18	Station	Urban	544640	211192	NO2	No	0.0	4.7	No	2.0
	Approach	Background								
HAR19	Finchmoor	Roadside	544498.974	208325.59	NO2	No	8.0	0.0	No	2.0
HAR20	Broadley Road	Roadside	543084.64	207700.97	NO2	No	2.0	1.0	No	2.0
HAR21	Commonside	Roadside	546031.33	208039.17	NO2	No	13.0	1.5	No	2.0
	Road									
HAR22	Challinor	Roadside	548307.03	209702.15	NO2	No	8.0	1.5	No	2.0
HAR23	Sheering Road	Roadside	548711	211990	NO2	No	9.0	0.5	No	2.0

Notes:

- (1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).
- (2) N/A if not applicable.

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

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2023 (%) ⁽²⁾	2019	2020	2021	2022	2023
HAR8	546942	211186	Suburban	90.9	84.6	22.6	17.4	16.8	16.2	16.3
HAR9	546888	209435	Urban Background	100	92.3	24.5	19.6	18.7	19.2	15.1
HAR10	544434	209709	Urban Background	100	92.3	24.4	19.5	18.7	19.0	16.6
HAR11	544680	210016	Kerbside	90.9	82.7	25.1	19.4	19.9	26.5	19.4
HAR13	547524	212479	Suburban	100	92.3	14.9	11.3	12.4	12.3	11.2
HAR16	549466	211598	Rural	100	92.3	17.3	12.4	12.3	13.3	10.8
HAR17	544297	210988	Kerbside	100	92.3	21.9	17.3	17.9	18.6	15.2
HAR18	544640	211192	Urban Background	100	92.3	27.5	20.8	20.4	21.9	17.8
HAR19	544498.974	208325.59	Roadside	63.6	61.5	19.4	14.0	14.3	16.5	15.3
HAR20	543084.64	207700.97	Roadside	81.8	76.9	18.1	14.5	14.6	13.7	10.9
HAR21	546031.33	208039.17	Roadside	100	92.3	23.3	18.7	17.6	15.5	13.2
HAR22	548307.03	209702.15	Roadside	100	92.3	21.5	18.0	16.6	17.3	14.0
HAR23	548711	211990	Roadside	100	92.3	N/A	N/A	13.7	13.7	11.8
HAR8	546942	211186	Suburban	90.9	84.6	22.6	17.4	16.8	16.2	16.3

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

Notes:

The annual mean concentrations are presented as µg/m³.

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

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

[☑] Diffusion tube data has been bias adjusted

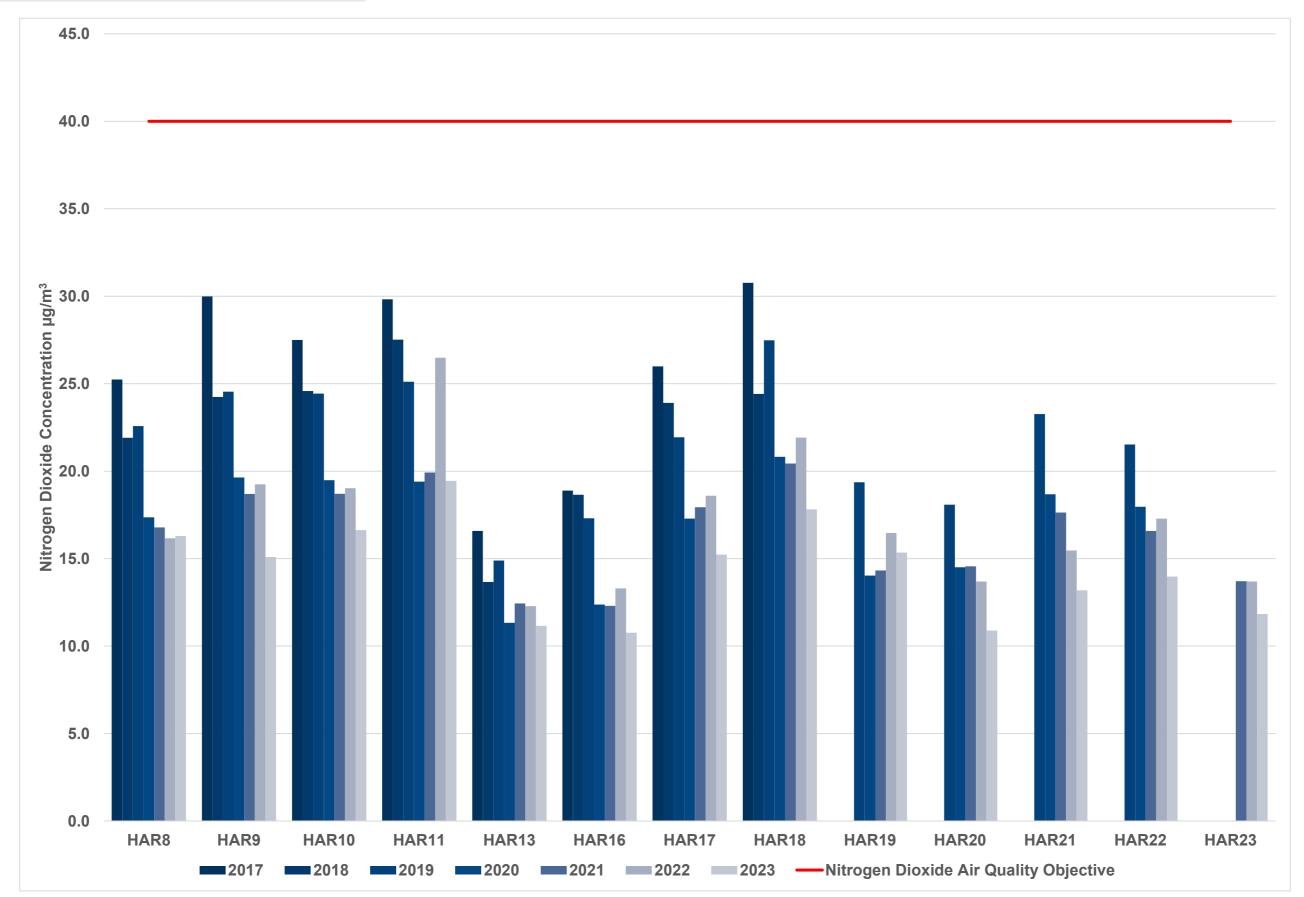
[⊠] Reported concentrations are those at the location of the monitoring site (bias adjusted and annualised, as required), i.e. prior to any fall-off with distance correction

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

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

- (1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.
- (2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A.1 - Trends in Annual Mean NO₂ Concentrations



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Appendix B: Full Monthly Diffusion Tube Results for 2023

Table B.1 - NO₂ 2023 Diffusion Tube Results (µg/m³)

DT ID	X OS Grid Ref (Easting	Y OS Grid Ref (Northi ng)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.77)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
HAR8	546942	211186	30.1	27.0	19.0	17.8	14.2	12.9	Missing	14.3	23.2	25.5	27.6	Not Exposed	21.2	16.3		
HAR9	546888	209435	31.2	28.9	12.8	15.4	13.4	12.4	15.9	14.5	21.4	24.2	25.5	Not Exposed	19.6	15.1		
HAR10	544434	209709	26.0	27.9	18.8	20.0	14.4	22.2	14.5	16.4	24.0	26.3	27.0	Not Exposed	21.6	16.6		
HAR11	544680	210016	32.9	21.6	Missing	31.1	21.1	13.3	18.9	21.4	29.2	34.4	28.6	Not Exposed	25.3	19.4		
HAR13	547524	212479	23.0	17.3	20.2	11.0	6.9	9.4	10.4	10.9	14.7	17.4	18.2	Not Exposed	14.5	11.2		
HAR16	549466	211598	14.9	13.6	16.6	16.5	12.8	11.9	8.5	10.9	15.8	18.0	14.3	Not Exposed	14.0	10.8		
HAR17	544297	210988	24.2	26.0	19.1	19.9	16.6	17.2	12.3	17.3	22.4	22.5	20.1	Not Exposed	19.8	15.2		
HAR18	544640	211192	31.6	24.6	20.4	20.4	18.4	18.7	16.7	18.6	27.9	26.9	30.3	Not Exposed	23.1	17.8		
HAR19	544499	208326	Missing	26.5	36.6	Missing	11.8	10.8	12.4	12.8	Missing	Not Exposed	22.2	Not Exposed	19.0	15.3		
HAR20	543085	207701	17.5	18.0	16.4	12.4	11.2	9.0	10.6	10.8	Missing	Not Exposed	21.4	Not Exposed	14.1	10.9		
HAR21	546031	208039	28.7	23.9	18.1	12.6	12.0	12.8	13.2	12.6	9.8	22.8	21.9	Not Exposed	17.1	13.2		
HAR22	548307	209702	27.0	22.1	19.4	18.3	15.4	13.1	12.8	14.1	10.6	22.8	24.0	Not Exposed	18.1	14.0		
HAR23	548711	211990	26.1	19.8	12.8	13.7	11.5	11.6	10.3	11.2	9.1	21.2	21.8	Not Exposed	15.4	11.8		

- ☑ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table B.1
- ☑ Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22
- ☑ National bias adjustment factor used
- ☑ Where applicable, data has been distance corrected for relevant exposure in the final column

Notes:

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

NO₂ annual means exceeding 60μg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

See Appendix C for details on bias adjustment and annualisation.

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

New or Changed Sources Identified Within Harlow During 2023

Harlow Council has not identified any significant new sources relating to air quality within the reporting year of 2023.

Additional Air Quality Works Undertaken by Harlow Council During 2023.

Harlow Council has not completed any additional air quality works within the reporting year of 2023.

QA/QC of Diffusion Tube Monitoring

- Harlow Council undertook monitoring at 13 sites in 2023.
- Harlow Council adheres with the Diffusion Tube Monitoring Calendar
- The diffusion tubes were supplied by Socotec (UKAS Testing Laboratory number 1015) with a preparation method of 50% triethanolamine (TEA) in Acetone.
- The AIR NO₂ proficiency testing scheme found that for 2023, 100% of the results submitted were subsequently determined as satisfactory

Diffusion Tube Annualisation

Annualisation is required for any site with data capture less than 75% but greater than 25%. One diffusion tube monitoring site required annualisation.

The diffusion tube processing tool is used to complete the annualisation process using background data sourced from regional AURN sites.

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

Site ID	Annualisatio n Factor Rochester Stoke	Annualisatio n Factor St Osyth	Annualisatio n Factor Wicken Fen	Average Annualisatio n Factor	Raw Data Annual Mean	Annualised Annual Mean
HAR19	1.0530	1.0336	1.0582	1.0483	19.0	19.9

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within this ASR have been corrected for bias using an adjustment factor. Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LAQM.TG22 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from NO_x/NO₂ continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

Harlow Council have applied the national bias adjustment factor of 0.77 to the 2023 monitoring data to maintain consistency with Councils in Essex. A summary of bias adjustment factors used by Harlow Council over the past five years is presented in Table C.2.

Table C.2 – Bias Adjustment Factor

Monitoring Year	Local or National	Diffusion Tube Preparation	Version of National Spreadsheet	Adjustment Factor
2023	National	Socotec 50% TEA in Acetone	03/24	0.77
2022	National	Socotec 50% TEA in Acetone	03/23	0.78
2021	National	Socotec 50% TEA in Acetone	03/22	0.77
2020	National	Socotec 50% TEA in Acetone	03/21	0.77
2019	National	Socotec 50% TEA in Acetone	03/20	0.75

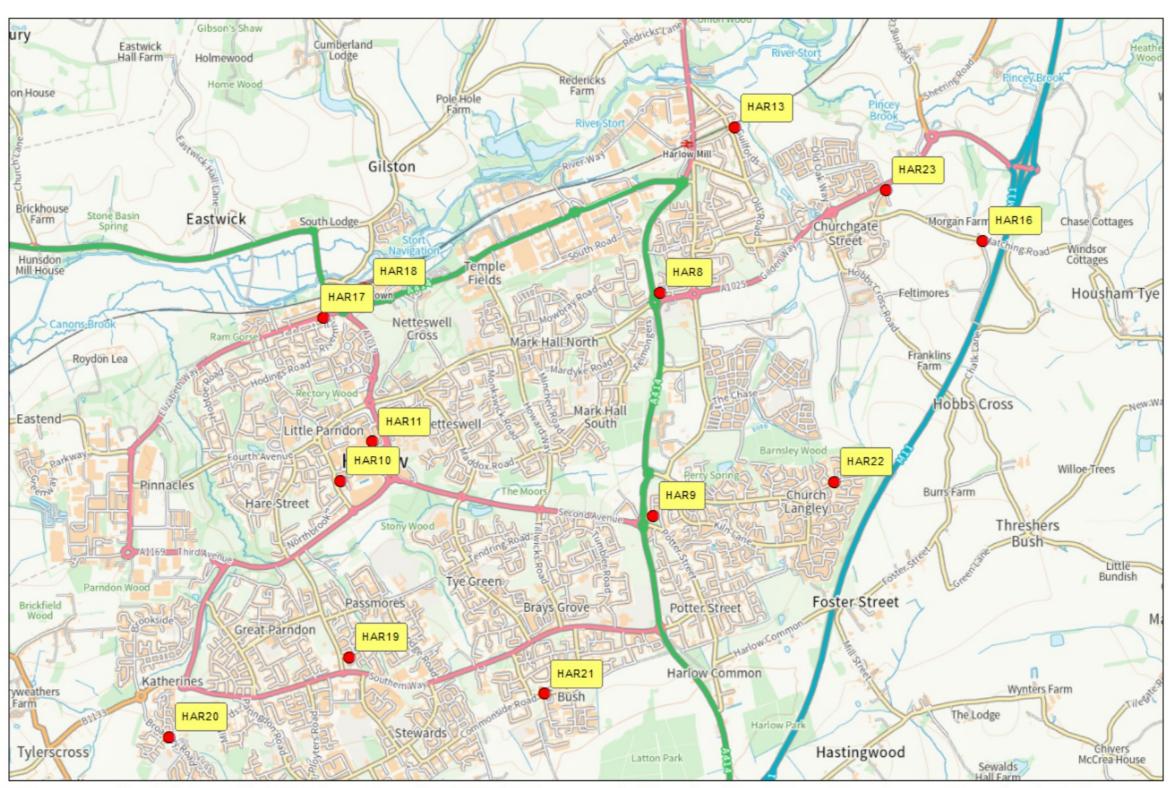
NO₂ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO₂ concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO₂ fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO₂ concentrations corrected for distance are presented in Table B.1.

No diffusion tube NO₂ monitoring locations within Harlow required distance correction during 2023.

Appendix D: Maps of Monitoring Locations and AQMAs

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



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Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England⁷

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO ₂)	200μg/m³ not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO ₂)	40μg/m³	Annual mean
Particulate Matter (PM ₁₀)	50μg/m³, not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM ₁₀)	40μg/m³	Annual mean
Sulphur Dioxide (SO ₂)	350μg/m³, not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO ₂)	125μg/m³, not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO ₂)	266μg/m³, not to be exceeded more than 35 times a year	15-minute mean

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

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
AQS	Air Quality Strategy
ASR	Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by National Highways
EU	European Union
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
NO ₂	Nitrogen Dioxide
NOx	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

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