




## 2025 Air Quality Annual Status Report (ASR)

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

Date: May, 2025

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Report Reference number	HAR/ASR2025
Date	8th May 2025
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## Local Responsibilities and Commitment

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

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## Executive Summary: Air Quality in Our Area

The 2025 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 2024, 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.

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 <sub>2</sub> )	Nitrogen dioxide is a gas which is generally emitted from high-temperature combustion processes such as road transport or energy generation.
Sulphur Dioxide (SO <sub>2</sub> )	Sulphur dioxide (SO <sub>2</sub> ) is a corrosive gas which is predominantly produced from the combustion of coal or crude oil.
Particulate Matter (PM <sub>10</sub> and PM <sub>2.5</sub> )	<p>Particulate matter is everything in the air that is not a gas.</p> <p>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.</p> <p>PM<sub>10</sub> refers to particles under 10 micrometres. Fine particulate matter or PM<sub>2.5</sub> are particles under 2.5 micrometres.</p>

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).

## 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.

## Essex Air Quality Strategy

The Draft Essex Air Quality Strategy 2025, developed by the Essex Air Quality Consortium, outlines a comprehensive plan to address air pollution, the largest environmental risk to public health in the UK, linked to approximately 36,000 deaths annually and nearly 900 deaths in Essex in 2021. The strategy, led by Essex County Council in partnership with 12 district, borough, city councils, and two unitary councils, aims to improve air quality across Essex, enhancing public health and environmental sustainability. A public consultation on the draft ran from January 20 to March 2, 2025, inviting feedback via an online survey, printed copies, and email submissions to refine the strategy's vision, aims, and actions.

The strategy's vision is to create a cleaner, healthier Essex by reducing air pollution through collaborative efforts. Its key aims include reducing emissions, protecting vulnerable populations, and raising awareness about air quality's health impacts, such as cardiovascular and respiratory diseases, lung cancer, and dementia.

Proposed actions focus on practical measures like promoting sustainable transport (e.g., cycling, walking, and public transport), enhanced air quality monitoring, and integrating air quality considerations into urban planning and development. The strategy emphasizes community engagement, encouraging residents to adopt low-emission behaviours, such as reducing car idling and using cleaner energy sources.

The strategy aligns with national air quality objectives and complements local efforts, such as the Essex Design Guide's guidance on air quality in planning applications. It addresses local challenges, including high pollution levels in Air Quality Management Areas (AQMAs), by advocating for mitigation measures like green infrastructure and low-emission vehicles. The consultation will shape the final strategy, ensuring it reflects community priorities and scientific evidence.

By fostering partnerships and public participation, the Draft Essex Air Quality Strategy strives for measurable improvements in air quality, supporting healthier lives and a sustainable future.

## Essex Air Quality Strategy Introduction Video



## Conclusions and Priorities

Harlow Council have concluded that:

- No air quality exceedances have been identified in 2024.
- 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). Harlow Council has been involved in developing the draft Essex Air Quality Strategy.

## How to get Involved

Harlow Council is a member of the Essex Air Quality consortium which along with Essex County Council. The Essex Air [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 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 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 in the form of the draft Essex Air Quality Strategy to prevent and reduce polluting activities. The draft Essex Air Quality Strategy is available at <https://essexair.org.uk/strategy>.

### 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	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 Essex Air Essex County Council	Essex County Council	Funded	£10k-50k	Planning	Not quantified	Adoption of AQS	Draft Air Quality Strategy	
2	Environmental Permit Inspection & Enforcement	Environmental Permits	Measures to reduce pollution through IPPC Permits going beyond BAT	N/A	Ongoing	Harlow Council	Harlow Council	Funded	< £10k	Implementation	Not quantified	N/A	Implementation	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	Funded	< £10k	Implementation	Not quantified	N/A	Implementation	Ongoing
4	Essex Carshare	Alternatives to private vehicle use	Car & lift sharing schemes	2014	Ongoing	Essex County Council	Essex County Council	Funded	< £10k	Implementation	Not quantified	N/A	Implementation	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	Funded	£500k - £1 million	Implementation	Not quantified	N/A	Implementation	Construction Started in March 2024

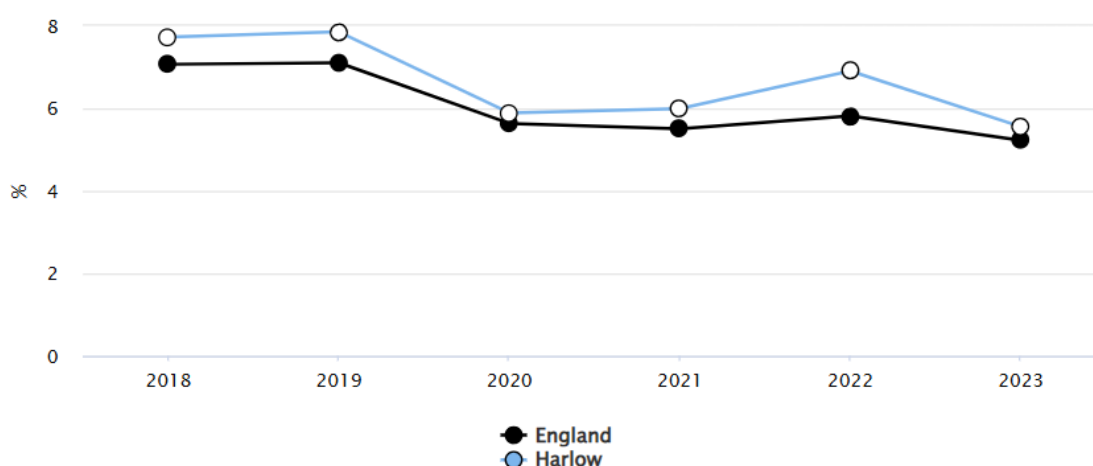
## 2.3 PM<sub>2.5</sub> – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy<sup>1</sup>, local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter (PM<sub>2.5</sub>). There is clear evidence that PM<sub>2.5</sub> (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<sub>2.5</sub> concentrations however notes the Defra background mapping resource which for PM<sub>2.5</sub> in 2024 models a maximum annual mean concentration of 8.05 µg/m<sup>3</sup> which is down from 10.5µg/m<sup>3</sup> in 2023.

The Public Health Outcomes Framework indicator D01 – Fraction of mortality attributable to particulate (PM<sub>2.5</sub>) air pollution which for 2023 gave a value of 5.6%.

**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<sub>2.5</sub>:

- Regular inspections of permitted industry where combustion and non-combustion processes could lead to anthropogenic emissions of PM<sub>2.5</sub>
- Working with Essex County Council (highway authority) to deliver Major Transport improvement [schemes](#) 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.

<sup>1</sup> 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 2024 by Harlow 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.

In 2024, 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 NO<sub>2</sub> at 12 sites during 2024. 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

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<sub>2</sub>)

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.

## 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) <sup>(1)</sup>	Distance to kerb of nearest road (m) <sup>(2)</sup>	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 Background	546888	209435	NO2	No	7.6	1.2	No	2.0
HAR10	Dadds Wood	Urban Background	544434	209709	NO2	No	12.5	33.4	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 Approach	Urban Background	544640	211192	NO2	No	0.1	4.7	No	2.0
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 Road	Roadside	546031.33	208039.17	NO2	No	13.0	1.5	No	2.0
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 NO<sub>2</sub> Monitoring Results: Non-Automatic Monitoring (µg/m<sup>3</sup>)**

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) <sup>(1)</sup>	Valid Data Capture 2024 (%) <sup>(2)</sup>	2020	2021	2022	2023	2024
HAR8	546942	211186	Suburban	73.2	73.2	17.4	16.8	16.2	16.3	14.1
HAR9	546888	209435	Urban Background	81.5	81.5	19.6	18.7	19.2	15.1	13.9
HAR10	544434	209709	Urban Background	73.2	73.2	19.5	18.7	19.0	16.6	14.8
HAR13	547524	212479	Suburban	81.5	81.5	11.3	12.4	12.3	11.2	9.5
HAR16	549466	211598	Rural	81.5	81.5	12.4	12.3	13.3	10.8	7.7
HAR17	544297	210988	Kerbside	51.5	51.5	17.3	17.9	18.6	15.2	15.6
HAR18	544640	211192	Urban Background	81.5	81.5	20.8	20.4	21.9	17.8	16.1
HAR19	544498.974	208325.59	Roadside	81.5	81.5	14.0	14.3	16.5	15.3	12.2
HAR20	543084.64	207700.97	Roadside	69.2	69.2	14.5	14.6	13.7	10.9	10.6
HAR21	546031.33	208039.17	Roadside	81.5	81.5	18.7	17.6	15.5	13.2	11.3
HAR22	548307.03	209702.15	Roadside	81.5	81.5	18.0	16.6	17.3	14.0	13.6
HAR23	548711	211990	Roadside	81.5	81.5	N/A	13.7	13.7	11.8	10.8

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

☒ Diffusion tube data has been bias adjusted.

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

**Notes:**

The annual mean concentrations are presented as µg/m<sup>3</sup>.

Exceedances of the NO<sub>2</sub> annual mean objective of 40µg/m<sup>3</sup> are shown in **bold**.

NO<sub>2</sub> annual means exceeding 60µg/m<sup>3</sup>, indicating a potential exceedance of the NO<sub>2</sub> 1-hour mean objective are shown in **bold and underlined**.

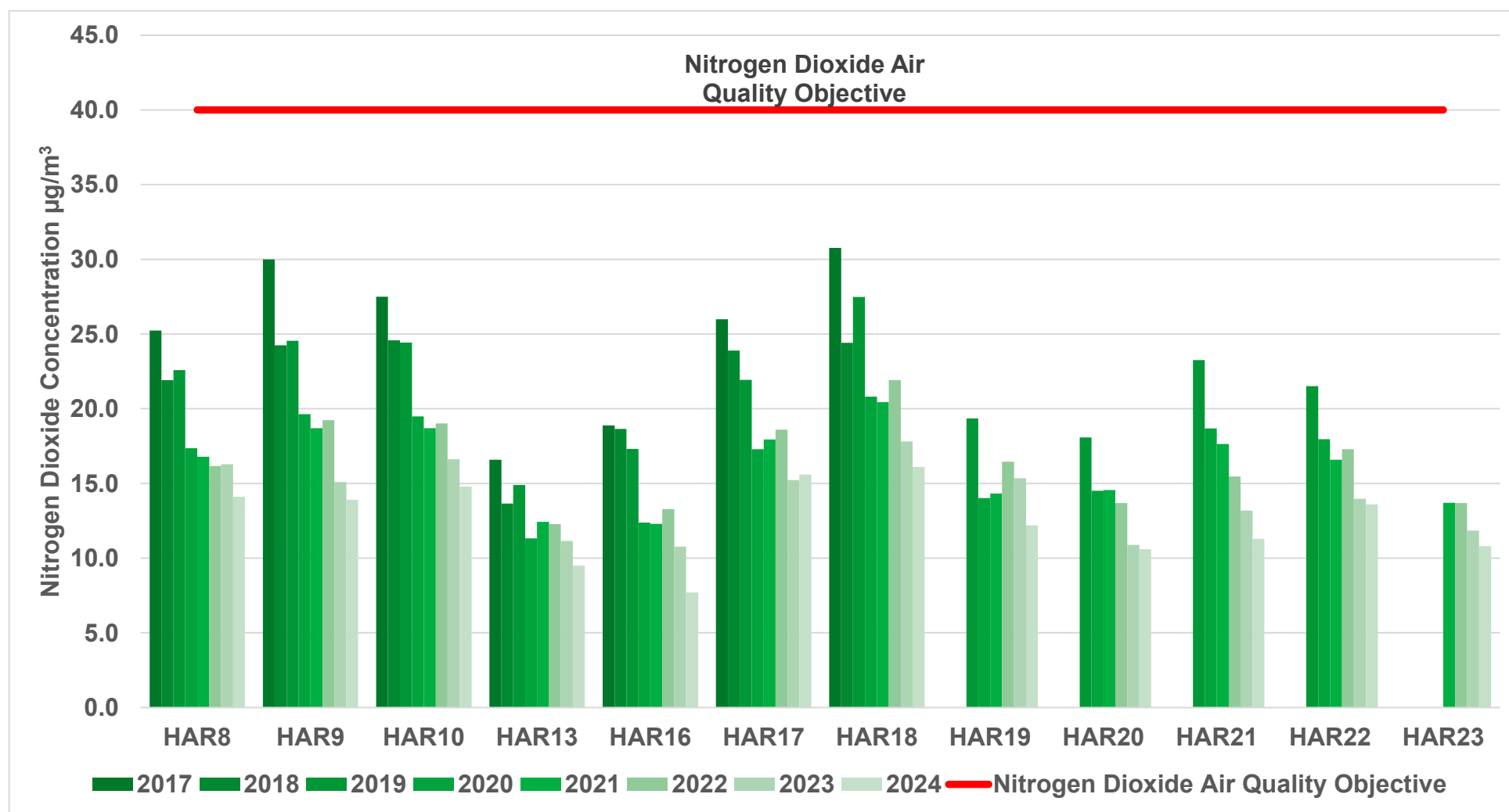
Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

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.2 – Trends in Annual Mean NO<sub>2</sub> Concentrations**



Appendix B: Full Monthly Diffusion Tube Results for 2024

Table B.1 – NO<sub>2</sub> 2024 Diffusion Tube Results (µg/m<sup>3</sup>)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.78)	Annual Mean: Distance Corrected to Nearest Exposure
HAR8	546942	211186	Not Exposed	28.1	21.2	11.5	12.4	12.7	15.9	12.9	19.0	Missing	Not Exposed	Not Exposed	16.7	14.1	N/A
HAR9	546888	209435	Not Exposed	27.5	20.9	16.3	14.1	13.1	14.0	15.6	17.7	23.5	Not Exposed	Not Exposed	17.8	13.9	N/A
HAR10	544434	209709	Not Exposed	24.9	19.3	17.3	15.3	12.9	15.7	Missing	19.9	24.5	Not Exposed	Not Exposed	18.6	14.8	N/A
HAR13	547524	212479	Not Exposed	19.1	15.2	11.0	8.5	9.4	9.8	9.7	12.8	14.8	Not Exposed	Not Exposed	12.1	9.5	N/A
HAR16	549466	211598	Not Exposed	13.9	12.1	12.2	9.2	9.5	7.5	11.8	3.0	13.6	Not Exposed	Not Exposed	9.8	7.7	N/A
HAR17	544297	210988	Not Exposed	23.8	17.9	18.7	Missing	14.2	14.5	17.7	Missing	Missing	Not Exposed	Not Exposed	17.5	15.6	N/A
HAR18	544640	211192	Not Exposed	27.8	23.6	19.5	17.1	17.6	21.3	18.0	19.9	22.3	Not Exposed	Not Exposed	20.6	16.1	N/A
HAR19	544499	208326	Not Exposed	20.5	14.4	13.0	11.4	17.5	14.2	13.0	18.5	17.9	Not Exposed	Not Exposed	15.6	12.2	N/A
HAR20	543085	207701	Not Exposed	17.7	10.3	13.4	10.4	10.5	11.8	12.0	Missing	17.6	Not Exposed	Not Exposed	12.7	10.6	N/A
HAR21	546031	208039	Not Exposed	21.9	15.1	14.3	12.3	11.5	12.4	13.5	17.4	11.8	Not Exposed	Not Exposed	14.4	11.3	N/A
HAR22	548307	209702	Not Exposed	25.5	18.0	15.1	11.4	21.2	13.5	13.1	19.2	21.2	Not Exposed	Not Exposed	17.5	13.6	N/A
HAR23	548711	211990	Not Exposed	17.8	13.6	12.1	10.4	10.8	12.9	13.2	15.0	19.0	Not Exposed	Not Exposed	13.8	10.8	N/A

- ☒ All erroneous data has been removed from the NO<sub>2</sub> 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
- ☒ Harlow Council confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System

**Notes:**

Exceedances of the NO<sub>2</sub> annual mean objective of 40µg/m<sup>3</sup> are shown in **bold**.

NO<sub>2</sub> annual means exceeding 60µg/m<sup>3</sup>, indicating a potential exceedance of the NO<sub>2</sub> 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 Harlow During 2024

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

### Additional Air Quality Works Undertaken by Harlow Council During 2024

Harlow Council has not completed any additional air quality works within the reporting year of 2024.

### QA/QC of Diffusion Tube Monitoring

- Harlow Council undertook monitoring at 12 sites in 2024.
- Harlow Council adheres with the Diffusion Tube Monitoring Calendar
- The diffusion tubes were supplied by Socotec Didcot (UKAS Testing Laboratory number 1015) with a preparation method of 50% triethanolamine (TEA) in Acetone.
- The AIR NO<sub>2</sub> proficiency testing scheme found that for 2024, 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%. The diffusion tube processing tool is used to complete the annualisation process using background data sourced from regional AURN sites. Four sites required annualisation.

**Table C.1 – Annualisation Summary (concentrations presented in µg/m<sup>3</sup>)**

Site ID	Annualisation Factor St Osyth	Annualisation Factor Rochester Stoke	Annualisation Factor Wicken Fen	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean
HAR8	1.0720	1.0603	1.1216	1.0846	16.7	18.1
HAR10	1.0284	1.0009	1.0313	1.0202	18.6	18.9
HAR17	1.0849	1.1407	1.1889	1.1382	17.5	19.9
HAR20	1.0530	1.0489	1.0875	1.0632	12.7	13.5

## 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<sub>x</sub>/NO<sub>2</sub> 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 a national bias adjustment factor of 0.78 to the 2024 monitoring data. 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	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	Socotec Didcot 50% TEA in Acetone	0.78
2023	National	Socotec Didcot 50% TEA in Acetone	0.77
2022	National	Socotec Didcot 50% TEA in Acetone	0.78
2021	National	Socotec Didcot 50% TEA in Acetone	0.77
2020	National	Socotec Didcot 50% TEA in Acetone	0.77

## NO<sub>2</sub> Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO<sub>2</sub> concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO<sub>2</sub> fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO<sub>2</sub> concentrations corrected for distance are presented in Table B.1.

No diffusion tube NO<sub>2</sub> monitoring locations within Harlow required distance correction during 2024.



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## Appendix E: Summary of Air Quality Objectives in England

**Table E.1 – Air Quality Objectives in England<sup>2</sup>**

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

<sup>2</sup> The units are in microgrammes of pollutant per cubic metre of air (µg/m<sup>3</sup>).

## 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 <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides
PM <sub>10</sub>	Airborne particulate matter with an aerodynamic diameter of 10µm or less
PM <sub>2.5</sub>	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO <sub>2</sub>	Sulphur Dioxide

## References

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- Essex Air Quality Draft Strategy available at; <https://essexair.org.uk/strategy>
- Essex Air social media feed available at; <https://x.com/EssexAir>
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- Local Air Quality Management Background Maps available at; <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/background-maps/>
- 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 available at; <https://laqm.defra.gov.uk/air-quality/featured/uk-regions-exc-london-technical-guidance/>
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- Public Health Framework available at; <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework>