Harlow Council

Working together for Harlow

2023 Air Quality Annual Status Report (ASR)

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

Date: June, 2023

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Executive Summary: Air Quality in Our Area

The 2023 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 2022, Harlow Council measured **no** exceedances of the Air Quality Objectives.

Air Quality in Harlow

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children, the elderly, and those with existing heart and lung conditions. There is also often a strong correlation with equalities issues because areas with poor air quality are also often less affluent areas[1,2].

The mortality burden of air pollution within the UK is equivalent to 29,000 to 43,000 deaths at typical ages[3], with a total estimated healthcare cost to the NHS and social care of £157 million in 2017[4].

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.

Air pollution is considered to be generally low in Harlow and monitoring of local Air Quality has measured no exceedances of air quality objective at relevant exposure. The trend of results across all monitored sites indicates that Air Quality is improving. A graph can be found in Appendix A that shows monitoring results from 2017 to 2021.

[1] Public Health England. Air Quality: A Briefing for Directors of Public Health, 2017
[2] Defra. Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006
[3] Defra. Air quality appraisal: damage cost guidance, January 2023
[4] Public Health England. Estimation of costs to the NHS and social care due to the health impacts of air pollution: summary report, May 2018

Actions to Improve Air Quality

Air quality in Harlow meets the Air Quality Objectives. However, significant development around the Harlow means that investment in the town's infrastructure is required to manage congestion, maintain good air quality and support future local economic growth.

Harlow Sustainable Transport Corridors

Advanced works on a new public travel route for Harlow & Gilston Garden Town are due to begin between Burnt Mill Roundabout and Harlow Town Centre.

Known as a sustainable transport corridor, the route will connect the new homes at Gilston in neighbouring East Herts with Harlow train station and town centre.

The corridor, along the A1019, is a key part of the transport infrastructure being delivered to make it easier for people to travel sustainably in the future.

M11 J7a Opening

The M11 Junction 7A is a critical infrastructure project funded through National Highways and Essex County Council. The junction opened to traffic in June 2022 and the junction, link road and upgraded Gilden Way provide improved access to Harlow's road network, helping facilitate growth and creating better connectivity for residents, businesses and visitors.

Following the opening of the new M11 Junction 7A, traffic restrictions have been planned to protect local roads in the area. Traffic will be monitored on Gilden Way and other key locations to look at whether other mitigations may be required in the future.

While the focus of the M11 Junction 7A has been the creation of a new motorway junction to help alleviate traffic within Harlow, walking and cycling provision is an important part of the wider scheme.

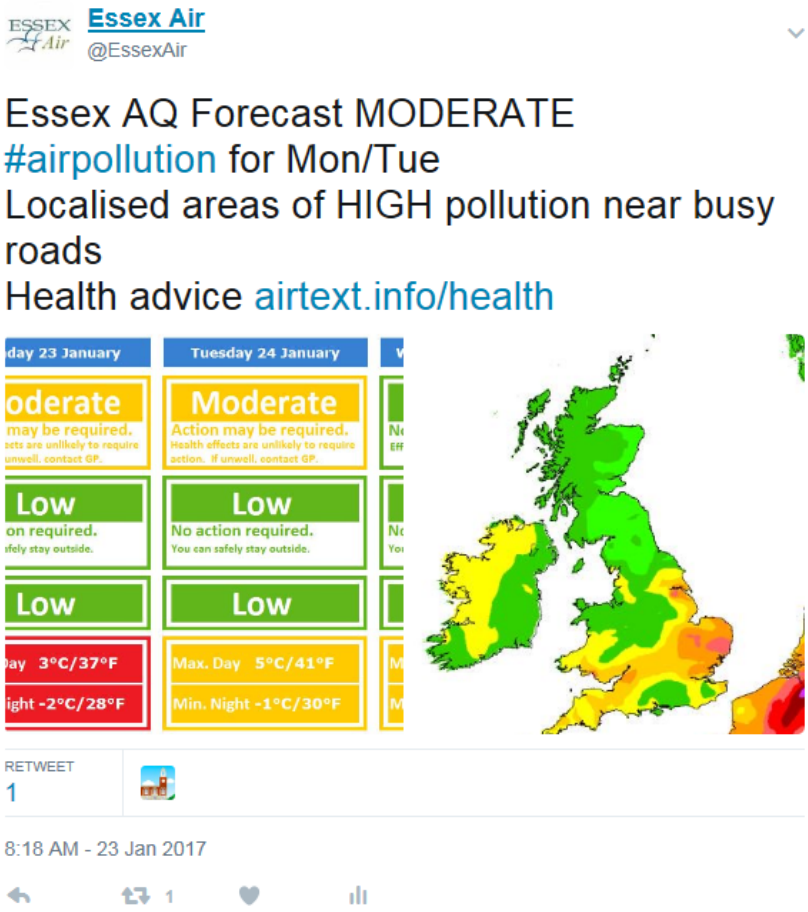
Travelling from the London Road roundabout along the widened Gilden Way, new segregated provision is being provided to the Churchgate Roundabout. From this point cyclists can connect into the wider network or continue along a new Gilden Way cycleway constructed as part of the Gilden Park development.

Local Engagement and How to get Involved

Harlow Council is a member of the Essex Air Quality consortium. The Essex Air website operated by the consortium is being updated and will be available in the second half of 2023.

The @EssexAir twitter feed provides localised weekly air pollution forecasts.

Figure i.1 Essex Air Twitter Air Quality Notifications



Links to Defra recommended actions and health advice are provided when air pollution is likely to be moderate or higher. This will enable those with heart or lung conditions, or other breathing problems to make informed judgements about their levels of activity or exposure.

The Essex Air twitter also promotes the DVSA service for reporting smoky lorries or buses. Particulate matter is usually not visible but when poorly maintained diesel engines can produce visible particles, appearing as smoke. Fine particles have an adverse effect on human health, particularly among those with respiratory and cardiovascular problem.

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 an impact on air quality.

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 approved by:

Norah Nolan – Interim Assistant Director Environment, Harlow Council

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

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1 Local Air Quality Management

This report provides an overview of air quality in Harlow during 2022. 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

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.

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

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	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	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	
2	Travel Budi	Alternatives to private vehicle use	Car & lift sharing schemes	2007	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	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	
5	M11 J7a and associated improvements	Traffic Management	Strategic highway improvements, Re-prioritising road space away from cars, including Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	2016	2022	Essex County Council	Essex County Council	NO	Funded	£1 million - £10 million	Implementation	Not quantified	N/A	Complete	
6	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	

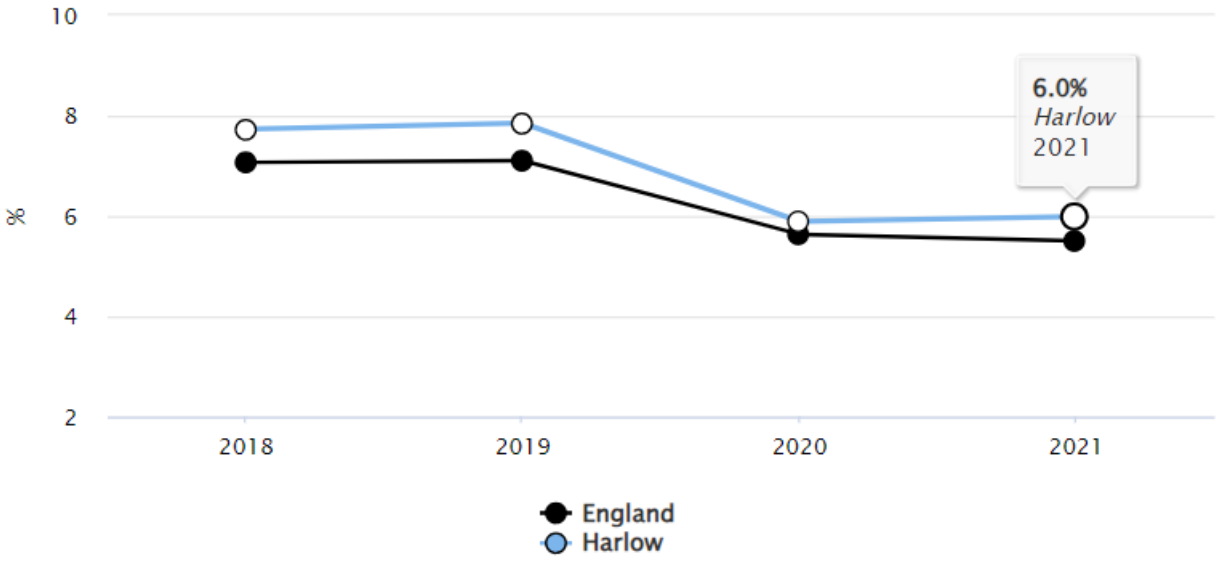
$PM_{2.5}$ – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG22 (Chapter 8), local authorities are expected to work towards reducing emissions and/or concentrations of $PM_{2.5}$ (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that $PM_{2.5}$ 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 2022 models a maximum annual mean concentration of 10.7µg/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 2021 gave a value of 6.0% which is below the average for England and significantly down from 7.2% in 2018.

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 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.

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

This section sets out the monitoring undertaken within 2022 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 2018 and 2022 to allow monitoring trends to be identified and discussed.

In 2022, Harlow Council measured **no** exceedances of the Air Quality Objectives.

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_2 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.

Individual Pollutants

3.1.3 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 NO_2 annual mean concentrations for the past five years with the air quality objective of 40µg/m^3.

For diffusion tubes, the full 2022 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 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
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 Approach	Urban Background	544640	211192	NO2	No	0.0	4.7	No	2.0
HAR19	Finchmoor	Roadside	544499	208326	NO2	No	8.0	0.0	No	2.0
HAR20	Broadley Road	Roadside	543085	207701	NO2	No	2.0	1.0	No	2.0
HAR21	Commonside Road	Suburban	546031	208039	NO2	No	13.0	1.5	No	2.0
HAR22	Challinor	Urban Background	548307	209702	NO2	No	8.0	1.5	No	2.0
HAR23	Sheering Road	Urban Background	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 2022 (%) (2)	2018	2019	2020	2021	2022
HAR8	546942	211186	Suburban	84.6	84.6	21.9	22.6	17.4	16.8	16.2
HAR9	546888	209435	Urban Background	84.6	84.6	24.2	24.5	19.6	18.7	19.2
HAR10	544434	209709	Urban Background	84.6	84.6	24.6	24.4	19.5	18.7	19.0
HAR11	544680	210016	Kerbside	82.7	82.7	27.5	25.1	19.4	19.9	26.5
HAR13	547524	212479	Suburban	92.3	92.3	13.7	14.9	11.3	12.4	12.3
HAR16	549466	211598	Rural	92.3	92.3	18.7	17.3	12.4	12.3	13.3
HAR17	544297	210988	Kerbside	82.7	82.7	23.9	21.9	17.3	17.9	18.6
HAR18	544640	211192	Urban Background	84.6	84.6	24.4	27.5	20.8	20.4	21.9
HAR19	544499	208326	Roadside	82.7	82.7	N/A	19.4	14.0	14.3	16.5
HAR20	543085	207701	Roadside	92.3	92.3	N/A	18.1	14.5	14.6	13.7
HAR21	546031	208039	Roadside	92.3	92.3	N/A	23.3	18.7	17.6	15.5
HAR22	548307	209702	Roadside	92.3	92.3	N/A	21.5	18.0	16.6	17.3
HAR23	548711	211990	Roadside	82.7	82.7	N/A	N/A	N/A	13.7	13.7

☒ **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**.

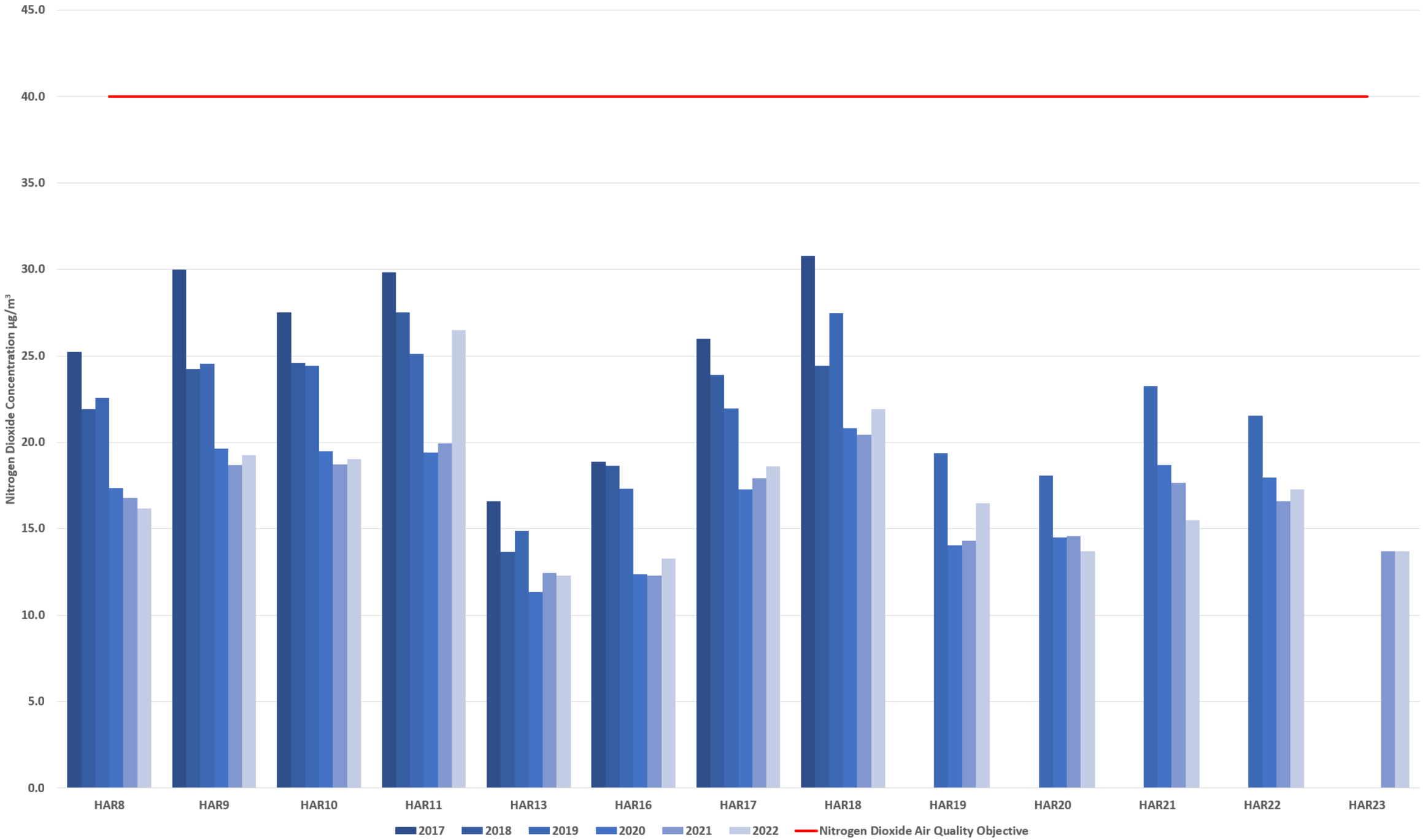
Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

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 NO2 Concentrations



Appendix B: Full Monthly Diffusion Tube Results for 2022

Table B.1 – NO2 2022 Diffusion Tube Results (µg/m3)

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 (0.76)	Annual Mean: Distance Corrected to Nearest Exposure
HAR8	546942	211186	32.8	Missing	24.3	11.4	9.4	17.6	14.0	No Results	22.2	27.3	25.9	27.8	21.3	16.2	N/A
HAR9	546888	209435	42.2	31.6	22.5	19.2	16.5	16.2	Missing	No Results	22.4	25.9	22.5	34.2	25.3	19.2	N/A
HAR10	544434	209709	42.0	Missing	25.8	20.3	18.1	16.1	17.7	No Results	22.8	28.3	23.7	35.5	25.0	19.0	N/A
HAR11	544680	210016	45.9	32.5	36.4	Missing	24.7	27.5	30.0	No Results	33.4	36.2	41.1	40.8	34.9	26.5	N/A
HAR13	547524	212479	25.5	19.3	14.5	10.9	10.4	9.6	9.9	No Results	11.9	16.0	23.5	26.2	16.2	12.3	N/A
HAR16	549466	211598	27.6	17.2	19.6	16.9	13.3	11.6	14.1	No Results	14.2	16.7	17.9	23.3	17.5	13.3	N/A
HAR17	544297	210988	37.3	23.5	27.3	21.9	19.9	17.7	20.0	No Results	22.3	Missing	25.8	29.0	24.5	18.6	N/A
HAR18	544640	211192	45.7	Missing	31.0	25.4	20.7	21.9	19.8	No Results	25.5	32.9	30.9	34.6	28.8	21.9	N/A
HAR19	544499	208326	31.4	23.4	21.5	15.4	14,9	13.4	13.7	No Results	18.3	23.9	25.6	30.0	21.7	16.5	N/A
HAR20	543085	207701	25.1	14.4	18.2	14.4	13.6	13.4	13.8	No Results	18.5	19.9	20.9	25.9	18.0	13.7	N/A
HAR21	546031	208039	33.6	22.0	19.3	14.8	13.6	13.8	14.0	No Results	18.2	21.9	23.3	29.4	20.4	15.5	N/A
HAR22	548307	209702	32.5	26.5	25.2	18.3	16.2	15.4	15.7	No Results	19.1	24.8	23.7	32.8	22.7	17.3	N/A
HAR23	548711	211990	25.1	20.6	18.8	Missing	11.7	12.1	12.4	No Results	15.5	19.3	23.3	21.4	18.0	13.7	N/A

☒ **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**

☒ **National bias adjustment factor used**

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

☒ **Harlow Council confirm that all 2022 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 Harlow Council During 2022

Harlow Council has not identified any new sources relating to air quality within the reporting year of 2022.

Additional Air Quality Works Undertaken by Harlow During 2022

Harlow Council has not completed any additional air quality works within the reporting year of 2022.

QA/QC of Diffusion Tube Monitoring

- Harlow Council undertook monitoring at 13 sites in 2022.
- 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 NO_2 proficiency testing scheme found that the laboratory achieved the following percentage of results determined as satisfactory for 2022:

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2022 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.

Harlow Council have applied a national bias adjustment factor of 0.76 to the 2022 monitoring data to maintain consistency with other Councils in Essex.

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

Table C.1 – Bias Adjustment Factor

Monitoring Year	Local or National	Diffusion Tube	If National, Version of National Spreadsheet	Adjustment Factor
2022	National	Socotec 50% TEA in Acetone	03/23	0.76
2021	National	Socotec 50% TEA in Acetone	03/22	0.78
2020	National	Socotec 50% TEA in Acetone	03/21	0.77
2019	National	Socotec 50% TEA in Acetone	03/20	0.75
2018	National	ESG Didcot 50% TEA in Acetone	03/19	0.76

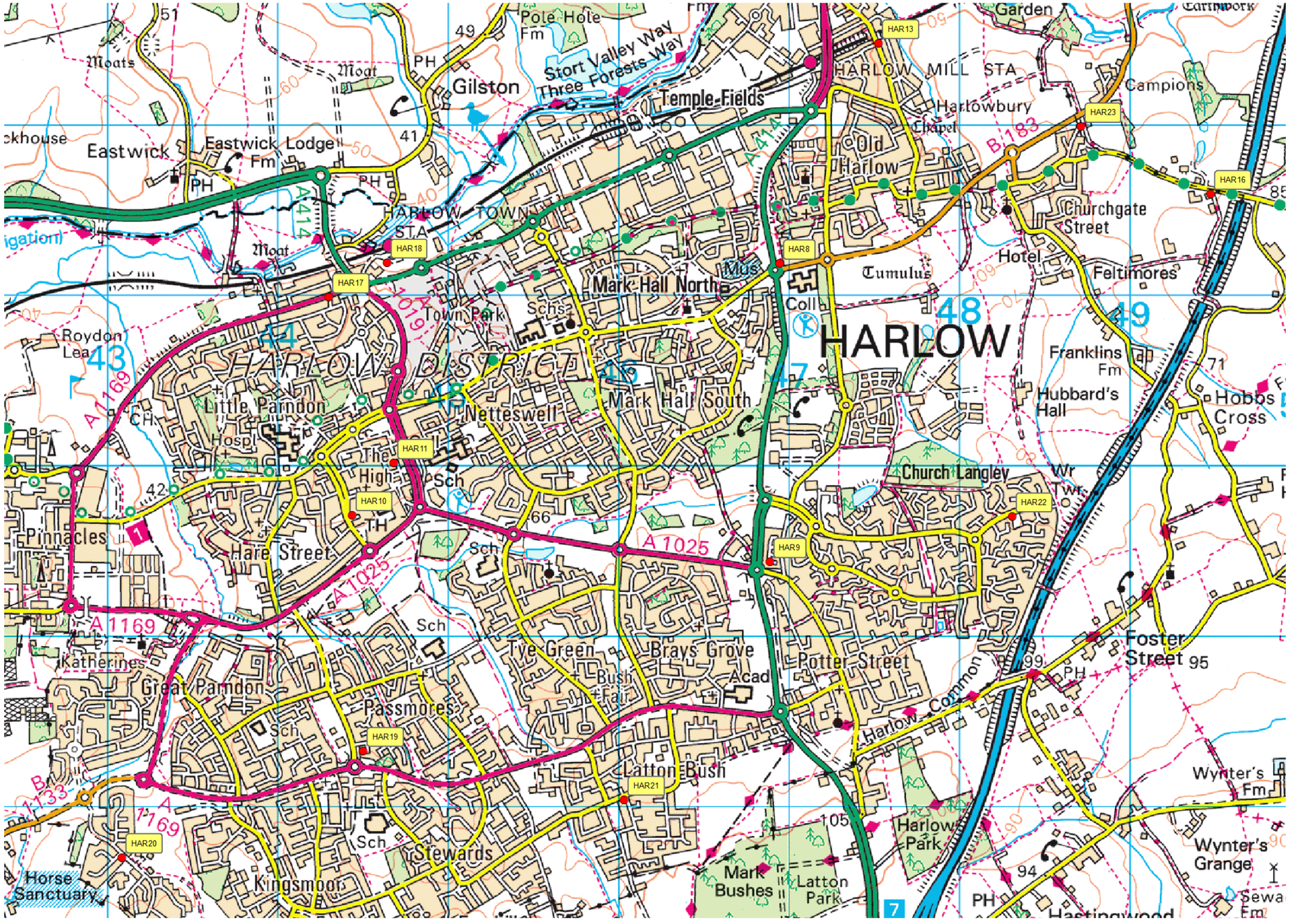
NO2 Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO_2 concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO_2 fall-off with distance calculator available on the LAQM Support website.

No diffusion tube NO_2 monitoring locations within Harlow required distance correction during 2022.

Appendix D: Maps of Monitoring Locations and AQMAs

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



Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England[5]

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

[5] 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
EU	European Union
FDMS	Filter Dynamics Measurement System
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
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

References

- Defra Diffusion Tube Bias Adjustment Factors Spreadsheet available at; https://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html
- Defra LAQM Summary of Laboratory Performance in AIR NO_2 PT Scheme available at; https://laqm.defra.gov.uk/diffusion-tubes/qa-qc-framework.html
- Essex Air Quality Consortium available at; http://www.essexair.org.uk
- Essex Air Twitter Feed available at; https://twitter.com/essexair
- EssexCarShare.com available at; https://liftshare.com/uk/community/essex
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