[Borough Name] Air Quality Annual Status Report for 2024

Date of publication: [Date]

|  |
| --- |
| **INSTRUCTIONS – Please Read**  This is the full Annual Status Report for submission to the GLA by 30th May 2025.  This summary report, compiled and published in 2025, reports on air quality in your borough during 2024.  **PLEASE NOTE:**  **To increase the visibility of local air quality information for the public on UK-AIR, local authorities are required to submit the following on the LAQM Portal:**   * [**Automatic Monitoring Data**](https://www.laqmportal.co.uk/login) * [**Diffusion Tube Data**](https://www.laqmportal.co.uk/login/dtdes/dtdes-upload)   **Local authorities are also encouraged to submit the following onto the LAQM portal.**   * [**Top Three Air Quality Actions**](https://www.laqmportal.co.uk/login)   This submission should be completed once all monitoring data for 2024 has been processed. For help with these processes, please use the following links:   * [NEW Automatic Data Processing Tool (ADPT)](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/automatic-data-processing-tool/) - developed to assist processing these monitoring data and provides output table which can be directly uploaded. * [Diffusion Tube Data Processing Tool (DTDPT)](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/) - developed to assist processing these monitoring data and provides output table which can be directly uploaded. * [FAQ – Top Three Air Quality Actions](https://laqm.defra.gov.uk/faqs/faq-146-top-three-air-quality-actions/)   If not using monitoring data processing tools, [templates](https://laqm.defra.gov.uk/air-quality/annual-reporting/london-annual-status-report-templates/) for submitting the data are available from the [LAQM website](https://laqm.defra.gov.uk/).  The Red text indicates where boroughs need to fill in information.  The Blue text specifies instructions and/or placeholders’ further information.  The following list is provided to assist local authorities in understanding the most frequent issues noted by the GLA during the ASR appraisal process:   * Outdated national bias adjustment factor used – If a national factor is to be used the most up to date national spreadsheet should be used to source the relevant bias adjustment factor. This will be available from <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/national-bias/> * Incorrect methodology used to complete annualisation – The LAQM annualisation tool should be used to complete annualisation. This is available from <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/annualisation-tool/> * Erroneous monthly diffusion tube data included within annual mean calculations; data should be removed as per Chapter 4 of LLAQM.TG19 * Distance correction – should only be completed for monitoring sites where the concentration is greater than 36µg m-3 and the receptor is not located at a point of relevant exposure * Insufficient detail provided regarding the progress of action plan measures, completion of Table M. * Monitoring and AQMA maps – these should be clear and accurate   When completing the annual report, the local authority should ensure all these points have been completed, where relevant, correctly to reduce the likelihood of report rejection at the appraisal stage.  **This box and all instructions should be deleted when the document is finished.** |



|  |
| --- |
| **ACCESSIBILTY INSTRUCTIONS**  This 2024 reporting template has been developed to comply with the [Accessibility Regulations (2018)](https://www.legislation.gov.uk/uksi/2018/952/made). Instructions are provided throughout the template as a steer to ensuring that the completed ASR remains compliant with Accessibility Regulations. Please refer to [Report Accessibility Instructions](https://laqm.defra.gov.uk/faqs/faq-145-report-accessibility-instructions/) for the key points to adhere to throughout the report.  It is recommended that the ASR is checked by your content team to ensure compliance.  **Delete this box when the document is finished** |

This report provides a detailed overview of air quality in [Borough Name] during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process[[1]](#footnote-2).

**Contact details:**

AQ officer/department contact details to be added

**Contents**

|  |
| --- |
| **INSTRUCTIONS**  This is the start of main body of the ASR, which should contain all the detailed technical information.  Please:   * Update Table of Contents and List of Tables and List of Figures on completion of report (select within text below> right click > update field>Update Entire Table) * If any figures are added please add a List of Figures matching the existing format * Include hyperlinks in the PDF version   **Delete this box when the document is finished** |

[Abbreviations 8](#_Toc191305526)

[1. Air Quality Monitoring 10](#_Toc191305527)

[1.1 Locations 10](#_Toc191305528)

[1.2 Comparison of Monitoring Results with AQOs 13](#_Toc191305529)

[2. Action to Improve Air Quality 27](#_Toc191305530)

[2.1 Air Quality Management Areas 27](#_Toc191305531)

[2.2 Air Quality Action Plan Progress 31](#_Toc191305532)

[3. Planning Update and Other New Sources of Emissions 34](#_Toc191305533)

[3.1 New or significantly changed industrial or other sources 35](#_Toc191305534)

[4. Additional Activities to Improve Air Quality 36](#_Toc191305535)

[4.1 London Borough of [Borough Name] Fleet 36](#_Toc191305536)

[4.3 Pan-London NRMM Auditing Project 36](#_Toc191305537)

[4.4 Air Quality Alerts 36](#_Toc191305538)

[Appendix A Details of Monitoring Site Quality QA/QC 37](#_Toc191305539)

[A.1 Automatic Monitoring Sites 37](#_Toc191305540)

[A.2 Diffusion Tubes 37](#_Toc191305541)

[A.3 Adjustments to the Ratified Monitoring Data 40](#_Toc191305542)

[Appendix B Full Monthly Diffusion Tube Results for 2024 47](#_Toc191305543)

[Appendix C Map(s) of Monitoring Locations and AQMAs 49](#_Toc191305544)

**Tables**

[**Table A. Summary of National Air Quality and International Standards, Objectives and Guidelines** 11](#_Toc191302694)

[Table B. Details of Automatic Monitoring Sites for 2024 12](#_Toc191302695)

[Table C. Details of Non-Automatic Monitoring Sites for 2024 14](#_Toc191302696)

[Table D. Annual Mean NO2 Monitoring Results: Automatic Monitoring (µg m-3) 18](#_Toc191302697)

[Table E. Annual Mean NO2 Monitoring Results: Non-Automatic Monitoring (µg m-3) 20](#_Toc191302698)

[Table F. NO2 Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 μg m-3 (If available. If not, this section can be deleted) 23](#_Toc191302699)

[Table G. Annual Mean PM10 Automatic Monitoring Results (μg m-3) (If available. If not, this section can be deleted) 24](#_Toc191302700)

[Table H. PM10 Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM10 24-Hour Means > 50 μg m-3 (If available. If not, this section can be deleted) 25](#_Toc191302701)

[Table I. Annual Mean PM2.5 Automatic Monitoring Results (μg m-3) (If available. If not, this section can be deleted) 26](#_Toc191302702)

[Table J. 2024 SO2 Automatic Monitoring Results: Comparison with Objectives (If available. If not, this section can be deleted) 27](#_Toc191302703)

[Table K. Other Pollutants (If available. If not, this section can be deleted) 29](#_Toc191302704)

[Table L. Declared Air Quality Management Areas 31](#_Toc191302705)

[Table M. Delivery of Air Quality Action Plan Measures 34](#_Toc191302706)

[Table N. Planning requirements met by planning applications in [Borough Name] in 2024 38](#_Toc191302707)

[Table O. Bias Adjustment Factor 43](#_Toc191302708)

[Table P. Non-Automatic Monitoring Data Adjustment 46](#_Toc191302709)

[Table Q. Automatic NO2 Monitoring Data Adjustment 48](#_Toc191302710)

[Table R. Automatic PM10 Monitoring Data Adjustment 50](#_Toc191302711)

[Table S. Automatic PM2.5 Monitoring Data Adjustment 52](#_Toc191302712)

[Table T. NO2 Fall off With Distance Calculations 54](#_Toc191302713)

[Table U. NO2 2024 Diffusion Tube Results (µg m-3) 56](#_Toc191302714)

**Figures**

[Figure A. Map of Non-Automatic Monitoring Site(s) 47](#_Toc190338357)

[Figure B. Map of Automatic Monitoring Site(s) 48](#_Toc190338358)

# Abbreviations

| **Abbreviation** | **Description** |
| --- | --- |
| AQAP | Air Quality Action Plan |
| AQMA | Air Quality Management Area |
| AQN | Air Quality Neutral |
| AQO | Air Quality Objective |
| AQP | Air Quality Positive |
| BEB | Buildings Emission Benchmark |
| CAB | Cleaner Air Borough |
| EV | Electric Vehicle |
| GLA | Greater London Authority |
| LAEI | London Atmospheric Emissions Inventory |
| LAQM | Local Air Quality Management |
| LLAQM | London Local Air Quality Management |
| NRMM | Non-Road Mobile Machinery |
| PM10 | Particulate matter less than 10 micron in diameter |
| PM2.5 | Particulate matter less than 2.5 micron in diameter |
| TEB | Transport Emissions Benchmark |
| TfL | Transport for London |

**Table A. Summary of National Air Quality and International Standards, Objectives and Guidelines**

| **Pollutant** | **Standard / Objective / Guideline** | **Averaging Period** | **Date(1)** |
| --- | --- | --- | --- |
| Nitrogen dioxide (NO2) | 200 μg m-3 not to be exceeded more than 18 times a year | 1-hour mean | 31 Dec 2005 |
| Nitrogen dioxide (NO2) | 40 μg m-3 | Annual mean | 31 Dec 2005 |
| Nitrogen dioxide (NO2) | WHO AQG(2): 10 μg m-3 | Annual mean |  |
| Particles (PM10) | 50 μg m-3 not to be exceeded more than 35 times a year | 24-hour mean | 31 Dec 2004 |
| Particles (PM10) | WHO AQG(2): 45 μg m-3 not to be exceeded more than 3-4 times a year | 24-hour mean |  |
| Particles (PM10) | 40 μg m-3 | Annual mean | 31 Dec 2004 |
| Particles (PM10) | WHO AQG(2): 15 μg m-3 | Annual mean |  |
| Particles (PM2.5) | 10 μg m-3(3) | Annual mean | 2040 |
| Particles (PM2.5) | London Mayoral Objective(4): 10 μg m-3 | Annual mean | 2030 |
| Particles (PM2.5) | WHO AQG(2): 5 μg m-3 | Annual mean |  |
| Particles (PM2.5) | Target of 15% reduction in concentration at urban background locations | 3-year mean | Between 2010 and 2021 |
| Particles (PM2.5) | WHO AQG(2): 15 μg m-3 | 24-hour mean |  |
| Sulphur dioxide (SO2) | 266 μg m-3 not to be exceeded more than 35 times a year | 15-minute mean | 31 Dec 2005 |
| Sulphur dioxide (SO2) | 350 μg m-3 not to be exceeded more than 24 times a year | 1-hour mean | 31 Dec 2004 |
| Sulphur dioxide (SO2) | 125 μg m-3 mot to be exceeded more than 3 times a year | 24-hour mean | 31 Dec 2004 |
| Sulphur dioxide (SO2) | WHO AQG(2): 40 μg m-3 not to be exceeded more than 3-4 times a year | 24-hour mean |  |

**Notes:**

1. Date by which to be achieved by and maintained thereafter
2. 2021 World Health Organisation Air Quality Guidelines
3. Environmental Target Regulations under the Environment Act 2021
4. London Mayoral Objective

# Air Quality Monitoring

|  |
| --- |
| **INSTRUCTIONS**  Within this section it is obligatory to complete all tables with monitoring data if you have monitors for the specified pollutants. It is not obligatory to include narrative on trends or any graphs, although you are encouraged to do so if you wish.  To help with consistency of approach to processing automatic monitoring data a specific [Automatic Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/automatic-data-processing-tool/) has been developed. It is recommended that this tool is used to process all automatic data. Any questions relating to the use of the tool should be directed to the [LAQM Helpdesk](mailto:laqmhelpdesk@bureauveritas.com).  The tab ADES from the Automatic Data Processing Tool aligns with the automatic data reporting requirements of Table B; therefore the data can be easily copied. If the Automatic Data Processing Tool has not been utilised, please copy across from any alternative calculation spreadsheet or populate manually.  **Delete this box when the document is finished** |

1.1 Locations

Table B. Details of Automatic Monitoring Sites for 2024

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Site ID** | **Site Name** | **Site Type** | **X OS Grid Ref (Easting)** | **Y OS Grid Ref (Northing)** | **Pollutants Monitored** | **In AQMA?** | **Which AQMA?** | **Monitoring Technique** | **Distance to Relevant Exposure (m) (1)** | **Distance to kerb of nearest road (m) (2)** | **Inlet Height (m)** |
| <CM1> | <Name 1> | <Roadside> | <666555> | <333444> | <NO2, PM10> | <YES/NO> | <AQMA 1> | <Chemiluminescent; FDMS> | <2.5> | <1> | <2> |
| <CM2> | <Name 2> | <Urban Background> | <777444> | <333555> | <NO2> | <YES/NO> | <AQMA 2> | <Chemiluminescent> | <25> | <N/A> |  |

**<CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM AUTOMATIC DATA PROCESSING TOOL (IF UTILISED)>**

**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 C. Details of Non-Automatic Monitoring Sites for 2024

| 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) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <DT1> | <Name 1> | <Roadside> | <666555> | <333444> | <NO2> | <YES/NO  AQMA 1> | <2.5> | <1> | <No> | <2> |
| <DT2> | <Name 2> | <Urban Background> | <777444> | <333555> | <NO2> | <YES/NO  AQMA 2> | <25> | <N/A> | <No> | <1.8> |

**<CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM DATA PROCESSING TOOL (IF UTILISED)>**

**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.

1.2 Comparison of Monitoring Results with AQOs

|  |
| --- |
| **INSTRUCTIONS**  To help with consistency of approach to processing diffusion tube monitoring data a specific [Diffusion Tube Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/) has been developed which should be used to process all diffusion tube data. The tool has been developed to calculate annual mean concentrations for the diffusion tube monthly data entered and amalgamates the following individual LAQM processing tools:   * Annualisation tool; * Precision and accuracy tool – calculation of local bias; and * NO2 fall off with distance calculator.   In regard to diffusion tube data to include within the ASR, the data for the following tables can be output from the relevant tabs from tool in the same format as within the ASR:   * Table C – Tab: Table C * Table E – Tab: Table E * Table U – Tab: Table R * Table P – Tab: Annualisation Summary * Table O – Tab: Step 3 - Bias Adjustment * Table T – Tab: Step 4 - Fall off with Distance   Any questions relating to the use of the tool should be directed to the [LAQM Helpdesk](mailto:laqmhelpdesk@bureauveritas.com).  Note, local authorities are strongly encouraged to submit their NO2 diffusion tube data to the [LAQM Portal](https://www.laqmportal.co.uk/login) via the Diffusion Tube Data Entry System (DTDES) upload facility. The [Diffusion Tube Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/) has been developed to assist local authorities in processing NO2 diffusion tube monitoring data. It provides an output table which can be directly uploaded via the DTDES.  To help with consistency of approach to processing automatic NO2 monitoring data a specific [Automatic Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/automatic-data-processing-tool/) has been developed. The tool has been developed to calculate annual mean concentrations for the hourly automatic data entered and assists with annualisation, calculation of the number of exceedances and identification of potential anomalous results.  In regard to automatic data to include within the ASR, the data for the following tables can be output from the relevant tabs from tool in the same format as within the ASR:   * Table D and Table F – Tab: NO2 Tables * Table G and Table H – Tab: PM10 Tables * Table I – Tab: PM2.5 Tables * Table Q – Tab: Annualisation Summary   Note, it is not a mandatory requirement for local authorities to submit their automatic NO2 data to the [LAQM Portal](https://www.laqmportal.co.uk/login) via the new [Automatic Data Entry System](https://www.laqmportal.co.uk/login) (ADES) upload facility, however it is strongly advised. The new [Automatic Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/automatic-data-processing-tool/) has been developed to assist local authorities in processing automatic NO2 monitoring data. It provides an output table which can be directly uploaded via the ADES.  If not using monitoring data processing tools, [templates](https://laqm.defra.gov.uk/air-quality/annual-reporting/london-annual-status-report-templates/) for submitting the data are available from the LAQM [website](https://laqm.defra.gov.uk/).  Any questions relating to the use of any LAQM tool should be directed to the [LAQM Helpdesk](mailto:laqmhelpdesk@bureauveritas.com).  **Please provide coordinates in OSGB36 National Grid Eastings and Northings format, e.g. 123456, 123456.** **Please ensure the Site IDs and Coordinates match those provided in and Table B and Table C.**  State clearly that all monitoring data presented has been properly ratified and corrected for bias where applicable. This should also include consideration and discussion of relevance to fall-off with distance correction that has been completed to the nearest **receptor, if required. Note, distance corrected concentration data should be included in Table U. only.**  Comment on whether the information led to the declaration, amendment or revocation of an AQMA, including the main points/trends coming out of the data – e.g. where are the exceedances, areas of concern or areas where concentrations have decreased.  Please ensure that results are labelled so that it is possible to link monitoring locations relative to each AQMA in clearly labelled maps in Appendix C.  **Delete this box when the document is finished** |

Table D. Annual Mean NO2 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 %(a)** | **Valid data capture 2024 %(b)** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** |
| <A1 > | <666555> | <333444> | <Roadside> | <95> | <95> | <**61.0**> | <**48.1**> | <**45.0**> | <**44.1**> | <**43.2**> | <35.1> | <26.3> |
| <A2 > | <777444> | <333555> | <Urban Background> | <94> | <94> | <36.2> | <38.0> | <35.1> | <31.2> | <30.1> | <32.3> | <31.2> |

**Notes:**

The annual mean concentrations are presented as μg m-3.

Exceedances of the NO2 annual mean AQO of 40 μg m-3 are shown in **bold**.

NO2 annual means in excess of 60 μg m-3, indicating a potential exceedance of the NO2 hourly mean AQS objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias.

All means have been “annualised” in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

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

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

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

Option to include some narrative on the 7-year trend here. If trend charts are added ensure these adhere to accessibility regulations.

Table E. Annual Mean NO2 Monitoring Results: Non-Automatic Monitoring (µg m-3)

|  |
| --- |
| **INSTRUCTIONS**  Populate Table E with all diffusion tube (non-automatic) annual mean NO2 monitoring results over the past seven years.  It is recommended that the [Diffusion Tube Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/) is used to process all diffusion tube data, the tool is available for download from the [LAQM website.](https://laqm.defra.gov.uk/) The tab Table E from the Diffusion Tube Data Processing Tool aligns with the diffusion tube data requirements of Table E.  If the tool has not been utilised, please copy across from any working spreadsheet or populate manually.  Concentrations should be annualised (where required) and bias adjusted, but **NOT** distance corrected.  Concentrations should be presented within Table E and throughout the report to one decimal place (1 dp).  Any exceedances of the NO2 annual mean objective of 40µg m-3 should be presented in **BOLD**.  Any NO2 annual means that exceed 60µg m-3, indicating a potential exceedance of the NO2 1-hour mean objective are shown in **BOLD** and **UNDERLINED**.  When completing the Data Capture values the following should be adhered to:   * Valid data capture for monitoring period – This should be the data capture for the period within the calendar year for which monitoring was undertaken. In certain cases, monitoring may only have been undertaken for part of the year, e.g. monitoring that began in January and ran until June (six months) before finishing - if results were returned for all six months this would equate to 100% data capture. * Valid data capture 2024 – This is the data capture based upon the calendar year. For the example given above this would result in a 50% data capture within 2024.   **Delete this box when the document is finished** |

| **Diffusion Tube ID** | **X OS Grid Ref (Easting)** | **Y OS Grid Ref (Northing)** | **Site Type** | **Valid Data Capture for Monitoring Period (%)(1)** | **Valid Data Capture 2024 (%)(2)** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <DT1> | <666555> | <333444> | <Roadside> | <100 > | <75 > | <16.2> | <17.3> | <15.5> | <18.8> | <19.9> | <20.5> | <45.2> |
| <DT2> | <777444> | <333555> | <Urban Background> | <100> | <100> | <21.2> | <20.2> | <15.5> | <18.8> | <19.9> | <20.5> | <65.5> |

**<CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM LAQM DATA PROCESSING TOOL (IF UTILISED)>**

**Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19 (confirm by selecting in box).**

**Diffusion tube data has been bias adjusted (confirm by selecting in box).**

**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 (confirm by selecting in box).**

**Notes:**

The annual mean concentrations are presented as µg m-3.

Exceedances of the NO2 annual mean objective of 40µg m-3 are shown in **bold**.

NO2 annual means exceeding 60µg m-3, indicating a potential exceedance of the NO2 1-hour mean objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias. All means have been “annualised” in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

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 F. NO2 Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 μg m-3 <If available. If not, this section can be deleted>

| **Site ID** | **X OS Grid Ref (Easting)** | **Y OS Grid Ref (Northing)** | **Site Type** | **Valid data capture for monitoring period %(a)** | **Valid data capture 2024 %(b)** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <A1 > | <666555> | <333444> | <Roadside> | <95> | <95> | <10> | <**19**> | <11> | <12> | <15> | <**19**> | <11> |
| <A2 > | <777444> | <333555> | <Urban Background> | <65> | <65> | <-> | <-> | <-> | <-> | <15 (185) > | <**25**> | <**16 (275)** > |

**Notes**

Results are presented as the number of 1-hour periods where concentrations greater than 200 μg m-3 have been recorded.

Exceedance of the NO2 short term AQO of 200 μg m-3 over the permitted 18 hours per 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.

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

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

Option to include some narrative on the 7-year trend here. If trend charts are added ensure these adhere to accessibility regulations.

Table G. Annual Mean PM10 Automatic Monitoring Results (μg m-3) <If available. If not, this section can be deleted>

| **Site ID** | **X OS Grid Ref (Easting)** | **Y OS Grid Ref (Northing)** | **Site Type** | **Valid data capture for monitoring period %(a)** | **Valid data capture 2024 %(b)** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <A1 > (Example) | <666555> | <333444> | <Roadside> | <95> | <95> | <35> | <37> | <35> | <37> | <35> | <37> | <**41**> |

**Notes**

The annual mean concentrations are presented as μg m-3.

Exceedances of the PM10 annual mean AQO of 40 μg m-3 are shown in **bold**.

All means have been “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

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

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

Option to include some narrative on the 7-year trend here. If trend charts are added ensure these adhere to accessibility regulations.

Table H. PM10 Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM10 24-Hour Means > 50 μg m-3 <If available. If not, this section can be deleted>

| **Site ID** | **X OS Grid Ref (Easting)** | **Y OS Grid Ref (Northing)** | **Site Type** | **Valid data capture for monitoring period %(a)** | **Valid data capture 2024 %(b)** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <A1 > | <666555> | <333444> | <Roadside> | <95> | <95> | <10> | <**36**> | <10> | <**36**> | <10> | <**36**> | <11> |
| <A2 > | <777444> | <333555> | <Urban Background> | <65> | <65> | <-> | <-> | <-> | <-> | <28 **(52)** > | <**38**> | <28 (30) > |

**Notes**

Exceedances of the PM10 24-hour mean objective (50 μg m-3 over the permitted 35 days per year) are shown in **bold.**

Where the period of valid data is less than 85% of a full year, the 90.4th percentile is provided in brackets.

(a) data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

(b) data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

Option to include some narrative on the 7-year trend here. If trend charts are added ensure these adhere to accessibility regulations.

Table I. Annual Mean PM2.5 Automatic Monitoring Results (μg m-3) <If available. If not, this section can be deleted>

| **Site ID** | **X OS Grid Ref (Easting)** | **Y OS Grid Ref (Northing)** | **Site Type** | **Valid data capture for monitoring period %(a)** | **Valid data capture 2024 %(b)** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <A1 > | <666555> | <333444> | <Roadside> | <95> | <95> | <-> | <-> | <-> | <-> | <**26**> | <**23**> | <20> |

**Notes**

The annual mean concentrations are presented as μg m-3.

Exceedances of the PM2.5 annual mean concentration target of 10 μg m-3 are shown in **bold**.

All means have been “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

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

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

Option to include some narrative on the 7-year trend here. If trend charts are added ensure these adhere to accessibility regulations.

Table J. 2024 SO2 Automatic Monitoring Results: Comparison with Objectives (If available. If not, this section can be deleted)

|  |
| --- |
| **INSTRUCTIONS**  The table should address whether there are:   * >35 15-minute means greater than 266 μg m-3? (Or if the period of valid data is less than 85% of a full year, is the 99.9th percentile of 15-minute means greater than this value) * >24 1-hour means greater than 350 μg m-3? (Or if the period of valid data is less than 85% of a full year, is the 99.7th percentile of 1-hour means greater than this value?) * >3 24-hour means greater than 125 μg m-3? (Or if the period of valid data is less than 85% of a full year, is the 99.2th percentile of 24-hour means greater than this value?)   Ensure that the monitoring site locations are representative of relevant public exposure.  Exceedances of the relevant SO2 AQOs objectives (or relevant percentiles if data capture is less than 85% for a full year) should be highlighted in **bold.**  **NOTE:** SO2 monitoring data should also be uploaded to the [LAQM Portal](https://www.laqmportal.co.uk/login) via the ADES. Whilst this pollutant is not included in the [Automatic Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/automatic-data-processing-tool/) (ADPT), the data can be added to the output tables to facilitate a complete upload of automatic monitoring data. The [ADES template](https://laqm.defra.gov.uk/air-quality/annual-reporting/london-annual-status-report-templates/) for submitting automatic data to the LAQM Portal is also available from the [LAQM website](https://laqm.defra.gov.uk/) should the ADPT not be utilised.  **Delete this box when the document is finished** |

| **Site ID** | **Valid data capture for monitoring period %(a)** | **Valid data capture 2024 %(b)** | **Number of 15-minute means > 266 μg m-3** | **Number of 1-hour mean > 350 μg m-3** | **Number 24-hour mean > 125 μg m-3** |
| --- | --- | --- | --- | --- | --- |
| <A1> | <95> | <95> | <10> | <**1**> | <0> |
| <A2> | <65> | <65> | <1> | <0> | <0> |

**Notes**

Results are presented as the number of instances where monitored concentrations are greater than the objective concentration.

Exceedances of the SO2 objectives are shown in **bold** (15-min mean = 35 allowed a year, 1-hour mean = 24 allowed a year, 24-hour mean = 3 allowed a year).

If the period of valid data is less than 85%, the relevant percentiles are provided in brackets.

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

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

Results for only 2024 are presented in Table J, but there is the option to include some narrative on the 7-year trend here. If trend charts are added ensure these adhere to accessibility regulations.

Table K. Other Pollutants (If available. If not, this section can be deleted)

This table may be used for reporting of Ozone, non-methane volatile organic compounds, ammonia, or any other pollutant which is monitored within the Borough.

| **Site ID** | **Valid data capture for monitoring period %(a)** | **Valid data capture 2024 %(b)** | **2024** |
| --- | --- | --- | --- |
| <A1> | <95> | <95> | <0> |
| <A2> | <65> | <65> | <0> |

Results for only 2024 are presented in Table K, but there is the option to include some narrative on the 7-year trend here. If trend charts are added ensure these adhere to accessibility regulations.

# Action to Improve Air Quality

* 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 12 months. The AQAP should specify how air quality targets will be achieved and maintained, and provide dates by which measures will be carried out.

**<Amend the following as necessary:>**

A summary of AQMAs declared by [Borough Name] can be found in Table L. The table presents a description of the <number of designated AQMAs> AQMA(s) that is/are currently designated within [Borough Name]. Appendix C provides maps of AQMA(s) and also the air quality monitoring locations in relation to the AQMA(s). The air quality objectives pertinent to the current AQMA designation(s) are as follows:

* <NO2 annual mean;>
* <PM10 24-hour mean; >
* <…>

<Or: >

[Borough Name] currently does not have any declared AQMAs. A local Air Quality Strategy is <in place / under development> to prevent and reduce polluting activities. <The Local Air Quality Strategy is available at (insert webpage and link if it is in place)>

<Add text if necessary:> We propose to declare a new AQMA in <x> area due to exceedances of the <NO2 annual mean/PM10 24-hour mean/…> air quality objective(s) (see <monitoring/additional information> section).

<Add text if necessary: > We propose to amend <AQMA Name> (see <monitoring/additional> section).

Table L. Declared Air Quality Management Areas

|  |
| --- |
| **INSTRUCTIONS**  Note the Mayor is determined to continue tackling air pollution to protect the health of Londoners, and has committed to meet the interim WHO PM2.5 target by 2030 and to meet the WHO’s latest guidelines for NO2 and PM2.5 as soon as possible. The GLA strongly advises against reducing or revoking AQMA already in place.  Please fill in Table L as per the following:   * AQMA Name = Official declared name of AQMA as presented on UK-AIR. * Date of Declaration = The date of the original declaration, and of any subsequent amendments. Revoked AQMAs do not require inclusion within table, however they may be discussed. * Pollutants and Air Quality Objectives = The pollutant for which the AQMA is declared, and the objective for that pollutant against which it is declared. **If an AQMA is declared for multiple pollutants and/or objectives, please include details of each pollutant/objective on a new row**. * One Line Description = A brief description of the characteristics and location of the AQMA. * Is air quality within the AQMA influenced by National Highways roads? = Yes/No. This may include emissions from Motorways, Urban Expressways, Dual carriageways, major trunk roads. * Level of Exceedance = Highest pollutant concentration and/or number of exceedances at point of relevant exposure, i.e. following NO2 fall off with distance correction (if applicable). The units presented should be relevant to the AQMA designation, i.e. for an AQMA designated for 1-hour the units should be hours (x hours were concentrations exceeded 200µg m-3):   + At Declaration – Monitored/modelled information that led to a declaration.   + Now – Latest Monitored/modelled information of current situation in AQMA for that pollutant. If there are no exceedances, please report the maximum concentration within the AQMA at a relevant point of exposure. * Number of Years Compliant with Air Quality Objective = Where relevant, provide details of the number of consecutive years that the relevant Air Quality Objective has been achieved within the AQMA. If an AQMA is declared for multiple pollutants and/or objectives, please include details for each pollutant/objective on a new row. As stated above, the Mayor is determined to continue tackling air pollution to protect the health of Londoners, and has committed to meet the interim WHO PM2.5 target by 2030 and to meet the WHO’s latest guidelines for NO2 and PM2.5 as soon as possible.  The GLA strongly advises against reducing or revoking AQMA already in place. * Name of AQAP and Date of Designation = Name/Title of action plan and the date it was published. * Web Link to AQAP = Where relevant, include a link to where the public can attain this plan. Ensure this hyperlink is completed to meet accessibility standards.   **Delete this box when the document is finished** |

| 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 Name 1> | Declared <Date>, Amended <Date> | <NO2> | E.g. An area encompassing a number of properties at the junction of road 1 and road 2. | <YES/NO> | <41> | <40> | <2 years> | E.g. AQAP for AQMA 1, May 2010 | Visit the AQAP for AQMA Name 1 |
| <AQMA Name 1> | Declared <Date>, Amended <Date> | <PM10> | E.g. An area encompassing a number of properties at the junction of road 1 and road 2. | <YES/NO> | <55> | <59> | <Not compliant> | E.g. AQAP for AQMA 2, May 2015 | Visit the AQAP for AQMA Name 2 |
| <AQMA Name 2> | Declared <Date>, Amended <Date> | <SO2> | E.g. An area encompassing residential properties near <industrial facility>. The AQMA was further extended in April 2013 to include residential properties along road name 2. | <YES/NO> | <28> | <21> | <1 year> | E.g. AQAP for AQMA 3, May 2020 | Visit the AQAP for AQMA Name 3 |

**[Borough Name] confirm the information on UK-Air regarding their AQMA(s) is up to date (confirm by selecting in box).**

**[Borough Name] confirm that all current AQAPs have been submitted to GLA (confirm by selecting in box).**

* 1. Air Quality Action Plan Progress

<Provide general detail on AQAP (e.g. date adopted, planned revision, planned revocation).>

Table M provides a brief summary of [Borough Name] progress against the Air Quality Action Plan, showing progress made this year. New projects which commenced in 2024 are shown at the bottom of the table (where applicable).

Table M. Delivery of Air Quality Action Plan Measures

|  |
| --- |
| **INSTRUCTIONS**  Please complete the table below or add your own table if preferred. Reporting on progress against your action plan is mandatory.  Table M has been updated to include the ‘Theme’ of the AQAP measures as depicted within the LLAQM Borough Air Quality Action Matrix. Please complete this column referencing each AQAP to the relevant ‘Theme’. The matrix is available [here](https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-london-boroughs).  If you have any new actions related to the new PM2.5 role, please include them in the table below, if you have any new policies, objectives or targets related to PM2.5 please include some brief narrative about them here.  **IMPORTANT NOTE:** To help improve the visibility of local authority action to reduce air pollution, the information provided on the top three measures in Table M will now be fed through to UK-AIR. Within the black outline and the coloured section of the table, please include three key measures that your local authority would like to raise awareness of amongst local communities. Please ensure each measure title is succinct and meaningful to the public and includes completion dates. Guidance on how to pitch this information is available [here](https://laqm.defra.gov.uk/faqs/faq-146-top-three-air-quality-actions/). You should avoid using acronyms in the description of the action or when listing the organisations involved.  You will be asked to copy and paste this information into a form on the [LAQM Portal](https://www.laqmportal.co.uk/login) during the ASR submission process.  The GLA will review the measures before being published.  **Delete this box when the document is finished** |

| **Measure** | **LLAQM Action Matrix Theme** | **Action** | **Estimated / Actual Completion Date** | **Organisations Involved** | **Progress**   * Emissions/Concentration data * Benefits * Negative impacts / Complaints   <Include emissions data and KPIs where possible. Please include recently completed projects as well as any new projects (which have commenced since you last reviewed your AQAP)> |
| --- | --- | --- | --- | --- | --- |
| <1.1> | <Monitoring and other core statutory duties> | <Undertake short-term monitoring survey using low-cost sensors to provide diurnal NO2 monitoring concentrations.> | <2030> | <Local Authority Environmental Health, Local Authority Transport Dept, County Council. > |  |
| <2.1> | <Emissions from developments and buildings> | <Completing spot checks on construction sites within the borough.> | <2025> | <Local Authority Environmental Health, Local Authority Transport Dept. > |  |
| <3.1> | <Public health and awareness raising> | <Promoting walking and cycling within all schools within the borough.> | <2024> | <Local Authority Environmental Health, Local Authority Waste Dept. > |  |
| <4.1> | <Delivery servicing and freight> | <Reducing emissions from deliveries to local businesses and residents.> | <2030> | <Local Authority Environmental Health, Local Authority Transport Dept, County Council. > |  |
| <5.1> | <Borough fleet> | <Reducing emissions from council fleets.> | <2025> | <Local Authority Environmental Health, Local Authority Transport Dept. > |  |
| <6.1> | <Localised solutions> | <Expanding and improving green infrastructure.> | <2024> | <Local Authority Environmental Health, Local Authority Waste Dept. > |  |
| <7.1> | <Cleaner transport> | <Using parking policy to reduce pollution emissions.> | <2030> | <Local Authority Environmental Health, Local Authority Transport Dept, County Council. > |  |

# Planning Update and Other New Sources of Emissions

|  |
| --- |
| **INSTRUCTIONS**  This section is mandatory.  For the questions relating to Planning Applications, it simply requires totals of the numbers of conditions that have been formally recommended for incoming Planning Applications. No further detail is required and it is not necessary to provide any detail on whether the application was accepted or whether the development has commenced.  However, for NRMM, in addition to including information on the number of Planning conditions, please also include basic enforcement information, as per the example below.  **Delete this box when the document is finished** |

Table N. Planning requirements met by planning applications in [Borough Name] in 2024

| **Condition** | **Number**  <Please complete all fields in this column with the total numbers> |
| --- | --- |
| Number of planning applications where an air quality impact assessment was reviewed for air quality impacts |  |
| Number of planning applications required to undertake construction dust monitoring and reporting (Please specify how you get access to dust monitoring data i.e. online tool or CSV file) |  |
| Number of CHPs/Biomass boilers refused on air quality grounds |  |
| Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions as detailed in [Air Quality Neutral LPG (london.gov.uk)](https://www.london.gov.uk/sites/default/files/2023-02/Air%20Quality%20Neutral%20LPG.pdf) point 3.1.5. |  |
| Number of developments required to install Ultra-Low NOX boilers |  |
| Number of developments where an AQ Neutral building and/or transport assessments undertaken |  |
| Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation |  |
| Number of planning applications with S106 agreements including other requirements to improve air quality |  |
| Number of planning applications with CIL payments that include a contribution to improve air quality |  |
| **NRMM: Central Activity Zone, Canary Wharf and Opportunity Areas**  Number of planning applications with conditions related to NRMM included.  Number of developments registered at [www.nrmm.london](http://www.nrmm.london).  Number of audits (based on the pan-London project report and / or inhouse auditing programme)  % of sites unregistered prior to audit  % of sites compliant  with Stage IV of the Directive and/or exemptions to the policy. | e.g.  12 conditions included  6 registered  5 audits  10% sites unregistered prior to audit  80% sites compliant after audit |
| **NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas)**  Number of planning applications with conditions related to NRMM included.  Number of developments registered at [www.nrmm.london](http://www.nrmm.london).  Number of audits (based on the pan-London project report and / or inhouse auditing programme)% of sites unregistered prior to audit  % of sites compliant with  Stage IIIB of the Directive and/or exemptions to the policy. | e.g.  12 conditions included  6 registered  5 audits  10% sites unregistered prior to audit  80% sites compliant after audit |

3.1 New or significantly changed industrial or other sources

<Please list any new sources here. Or state “No new sources identified” if relevant.>

# Additional Activities to Improve Air Quality

4.1 London Borough of [Borough Name] Fleet

|  |
| --- |
| **INSTRUCTIONS**  Please provide details of how many a) zero emission and b) zero emission capable vehicles there are within your borough’s fleet, and what percentage of the fleet these represent.  **Delete this box when the document** **is finished.** |

**4.2** **Planning Enforcement**

|  |
| --- |
| **INSTRUCTIONS**  If possible (this is not mandatory, but would be very much appreciated), please briefly describe the processes you have in place to ensure that all relevant planning applications are reviewed and any air quality conditions, including NRMM conditions, are enforced.  **Delete this box when the document is finished** |

4.3 Pan-London NRMM Auditing Project

|  |
| --- |
| **INSTRUCTIONS**  Please confirm that your borough is continuing to support the pan-London NRMM auditing project in 2025-2026.  Please provide details on the following:   * What is the standard wordings for NRMM conditions on construction/demolition sites? * Where is this wording applied? (e.g. Decision notice / S106 agreement / Construction Management Plan / Code of Practice) * What sites is this condition applied to? (i.e. All planning applications / only sites with S106 agreement etc.)   **Delete this box when the document is finished** |

4.4 Air Quality Alerts

|  |
| --- |
| **INSTRUCTIONS**  Please provide details as to whether your borough support *air*TEXT (<https://www.airtext.info/>) or, if not, which other direct alerts service is supported.  Please provide details as to whether your borough cascade the Mayor’s air quality alert messaging  **Delete this box when the document is finished** |

* 1. **Air Quality Positive**

|  |
| --- |
| **INSTRUCTIONS**  Please tell us if you have examples of innovative mitigation measures committed as part of a submitted Air Quality Positive Matrix which aligns with the Air Quality Positive London Plan Guidance, and if you are happy for the GLA to include this as one of the case studies for workshops and guidance documents. (Yes / No)  If yes, please provide the relevant officer’s contact details so we can ask for further  **Delete this box when the document is finished** |

# Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

|  |
| --- |
| **INSTRUCTIONS**  Describe briefly the frequency of routine calibrations and periodic site audits and who carries these out (LA or contractor) (if applicable). Are there any issues to be highlighted?  **Delete this box when the document is finished** |

PM10 Monitoring Adjustment

|  |
| --- |
| **INSTRUCTIONS**  Please describe any adjustments made to Particulate Matter monitoring data e.g. correction factors applied to BAM data or use of VCM to correct TEOM data.  **Delete this box when the document is finished** |

A.2 Diffusion Tubes

|  |
| --- |
| **INSTRUCTIONS**  Details of QA/QC for diffusion tubes should include:   * Lab supplying and analysing the tubes * Preparation method used * Confirmation that the lab follows the procedures set out in the Practical Guidance * Results of laboratory precision results:   + <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/precision-and-accuracy/> for precision   + <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/qa-qc-framework/> for AIR-PT results * Bias adjustment factor from the database available on the LAQM Support Website at: <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/national-bias/>. Please ensure you confirm the version of the database used (this can be found in the upper right-hand part of the spreadsheet) * Whether the Local Authority has compared the diffusion tubes with the reference method in a co-location study (details of this can be included as a sub-section or appendix) * The bias adjustment factor being applied to the annual means from the diffusion tubes * Where this came from – i.e. local co-location   Information on QA/QC for diffusion tubes can be found on the LAQM website at <https://laqm.defra.gov.uk/annual-reporting/>.  Give the bias adjustment factors for the previous years included in the body of the report – but do not give the full calculation for the previous years.  **Delete this box when the document is finished** |

Factor from Local Co-location Studies (if available)

|  |
| --- |
| **INSTRUCTIONS**  Provide annual means and bias for each site – including type of site location.  Local authorities are encouraged to share co-location information with other authorities. The questionnaire for adding your own co-location study to the database is at <https://laqm.defra.gov.uk/air-quality/annual-reporting/co-location-data/>.  Please complete and return the co-location questionnaire to ensure your monitoring data is considered for inclusion in the database of bias adjustment factors provided by the LAQM Helpdesk. This should be done as soon as possible to ensure the database is updated in advance of report submission.  **Delete this box when the document is finished** |

Discussion of Choice of Factor to Use

|  |
| --- |
| **INSTRUCTIONS**  If both local and national Bias Adjustment Factors are available please state which has been used and the reasons for the choice, also describing the impact of this choice (e.g. whether the factor used is conservative). Complete Table O with a history of adjustment factors used to help support and expand upon the choice of factor used.  **Delete this box when the document is finished** |

Table O. Bias Adjustment Factor

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Local or National | If National, Version of National Spreadsheet | Adjustment Factor |
| <2024> | <National> | <09/24> | <1.06> |
| <2023> | <National> | <06/23> | <1.08> |
| <2022> | <National> | <09/21> | <1.07> |
| <2021> | <National> | <06/19> | <1.05> |
| <2020> | <National> | <03/18> | <1.01> |
| <2019> | <Local> | <-> | <0.88> |
| <2018> | <Local> | <-> | <0.88> |
| <2017> | <Local> | <-> | <0.88> |

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

|  |
| --- |
| **INSTRUCTIONS**  Where data capture is less than 75% and greater than 25% of a full calendar year (between 3 and 9 months), the mean should be “annualised” – i.e. adjusted using the methodology outlined in LLAQM.TG(19) before being compared to annual mean objectives.  The [Annualisation Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/annualisation-tool/) or the [Diffusion Tube Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/) can be used to complete diffusion tube annualisation. Either tool should be used to ensure the correct methodology for annualisation is utilised. Table P has the same structure as the Annualisation Summary tab within both tools, therefore the data can easily be copied.  The [Automatic Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/automatic-data-processing-tool/) can be used to complete continuous NO2, PM10 and PM2.5 monitoring annualisation. The tool should be used to ensure the correct methodology for annualisation is utilised. Table Q, Table R and Table S have the same structure as the Annualisation Summary tab within the tool, therefore the data can easily be copied.  If a LAQM data processing tool has not been used please enter the relevant data into the table below or replace this table with one presenting the relevant details of annualisation. |

Distance Adjustment

|  |
| --- |
| **INSTRUCTIONS**  If an exceedance is measured at a monitoring site which is not representative of public exposure, use the procedure specified in LLAQM.TG(19) to estimate the concentration at the nearest receptor and describe the process followed here. It is recommended that Table T is completed using the outputs from the NO2 fall off with distance tool, the tool can be downloaded from [https://laqm.defra.gov.uk/tools-monitoring-data/no2-falloff.html](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/no2-falloff/). Distance adjustment is also included within the [Diffusion Tube Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/). |

Table P. Non-Automatic Monitoring Data Adjustment

|  |
| --- |
| **INSTRUCTIONS**  Non-automatic annualisation results should be included within Table P.  The [Annualisation Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/annualisation-tool/) or the [Diffusion Tube Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/) can be used to complete diffusion tube annualisation. Either tool should be used to ensure the correct methodology for annualisation is utilised. Table P has the same structure as the **Annualisation Summary** tab within both tools, therefore the required data can easily be copied.  If less than four background sites have been used to annualise the relevant boxes can be left blank or a dash added (-). Any relevant comments should be added within the comments column.  This table should be deleted if annualisation has not been required at any site.  **Delete this box when the document is finished** |

| Site ID | Annualisation Factor <Site 1 Name> | Annualisation Factor <Site 2 Name> | Annualisation Factor <Site 3 Name> | Annualisation Factor <Site 4 Name> | Average Annualisation Factor | Raw Data Annual Mean (µg m-3) | Annualised Annual Mean (µg m-3) | Comments |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <A1> |  |  |  |  |  |  |  |  |
| <A2> |  |  |  |  |  |  |  |  |

Table Q. Automatic NO2 Monitoring Data Adjustment

|  |
| --- |
| **INSTRUCTIONS**  Automatic NO2 annualisation results should be included within Table Q.  The [Automatic Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/automatic-data-processing-tool/) can be used to complete continuous NO2 monitoring annualisation. The tool should be used to ensure the correct methodology for annualisation is utilised. Table Q has the same structure as the Annualisation Summary tab within the tools, therefore the required data can easily be copied.  If less than four background sites have been used to annualise the relevant boxes can be left blank or a dash added (-).  This table should be deleted if NO2 annualisation has not been required at any site.  **Delete this box when the document is finished** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Background Site** | **Annual Data Capture (%)** | **Annual Mean (Am)** | **<Site ID>** | | **<Site ID>** | | **<Site ID>** | | **<Site ID>** | |
| **Period Mean (Pm)** | **Ratio (Am / Pm)** | **Period Mean (Pm)** | **Ratio (Am / Pm)** | **Period Mean (Pm)** | **Ratio (Am / Pm)** | **Period Mean (Pm)** | **Ratio (Am / Pm)** |
| <Site Name> | <96.0> | <7.9> | <7.7> | <1.020> |  |  |  |  |  |  |
| <Site Name> | <99.8> | <7.9> | <7.4> | <1.057> |  |  |  |  |  |  |
| <Site Name> | <97.7> | <8.8> | <8.5> | <1.034> |  |  |  |  |  |  |
| <Site Name> | <98.5> | <6.9> | <6.6> | <1.045> |  |  |  |  |  |  |
| **Average (Ra)** | | | <1.041> | |  | |  | |  | |
| **Raw Data Annual Mean (M)** | | | <7.6> | |  | |  | |  | |
| **Annualised Annual Mean (M x Ra)** | | | <7.9> | |  | |  | |  | |

Table R. Automatic PM10 Monitoring Data Adjustment

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **INSTRUCTIONS**  Automatic PM10 annualisation results should be included within Table R.  The [Automatic](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/) Data Processing Tool can be used to complete continuous PM10 monitoring annualisation. The tool should be used to ensure the correct methodology for annualisation is utilised. Table R has the same structure as the Annualisation Summary tab within the tools, therefore the required data can easily be copied.  If less than four background sites have been used to annualise the relevant boxes can be left blank or a dash added (-).  This table should be deleted if PM10 annualisation has not been required at any site.  **Delete this box when the document is finished** | | | | | | | | | | | | |
| **Background Site** | **Annual Data Capture (%)** | **Annual Mean (Am)** | **<Site ID>** | | **<Site ID>** | | | **<Site ID>** | | **<Site ID>** | | | |
| **Period Mean (Pm)** | **Ratio (Am / Pm)** | **Period Mean (Pm)** | | **Ratio (Am / Pm)** | **Period Mean (Pm)** | **Ratio (Am / Pm)** | **Period Mean (Pm)** | | **Ratio (Am / Pm)** | |
| <Site Name> | <96.0> | <7.9> | <7.7> | <1.020> | |  |  |  |  | |  |  | |
| <Site Name> | <99.8> | <7.9> | <7.4> | <1.057> | |  |  |  |  | |  |  | |
| <Site Name> | <97.7> | <8.8> | <8.5> | <1.034> | |  |  |  |  | |  |  | |
| <Site Name> | <98.5> | <6.9> | <6.6> | <1.045> | |  |  |  |  | |  |  | |
| **Average (Ra)** | | | <1.041> | | |  | |  | | |  | | |
| **Raw Data Annual Mean (M)** | | | <7.6> | | |  | |  | | |  | | |
| **Annualised Annual Mean (M x Ra)** | | | <7.9> | | |  | |  | | |  | | |

Table S. Automatic PM2.5 Monitoring Data Adjustment

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **INSTRUCTIONS**  Automatic PM2.5 annualisation results should be included within Table S.  The [Automatic](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/) Data Processing Tool can be used to complete continuous PM2.5 monitoring annualisation. The tool should be used to ensure the correct methodology for annualisation is utilised. Table S has the same structure as the Annualisation Summary tab within the tools, therefore the required data can easily be copied.  If less than four background sites have been used to annualise the relevant boxes can be left blank or a dash added (-).  This table should be deleted if PM2.5 annualisation has not been required at any site.  **Delete this box when the document is finished** | | | | | | | | | | |
| **Background Site** | **Annual Data Capture (%)** | **Annual Mean (Am)** | **<Site ID>** | | **<Site ID>** | | **<Site ID>** | | **<Site ID>** | | |
| **Period Mean (Pm)** | **Ratio (Am / Pm)** | **Period Mean (Pm)** | **Ratio (Am / Pm)** | **Period Mean (Pm)** | **Ratio (Am / Pm)** | **Period Mean (Pm)** | **Ratio (Am / Pm)** | |
| <Site Name> | <96.0> | <7.9> | <7.7> | <1.020> |  |  |  |  |  |  | |
| <Site Name> | <99.8> | <7.9> | <7.4> | <1.057> |  |  |  |  |  |  | |
| <Site Name> | <97.7> | <8.8> | <8.5> | <1.034> |  |  |  |  |  |  | |
| <Site Name> | <98.5> | <6.9> | <6.6> | <1.045> |  |  |  |  |  |  | |
| **Average (Ra)** | | | <1.041> | |  | |  | |  | | |
| **Raw Data Annual Mean (M)** | | | <7.6> | |  | |  | |  | | |
| **Annualised Annual Mean (M x Ra)** | | | <7.9> | |  | |  | |  | | |

Table T. NO2 Fall off With Distance Calculations

|  |
| --- |
| **INSTRUCTIONS**  Please enter the outputs from the LAQM NO2 Fall-Off with Distance Calculator within the table below. The calculator should be used to ensure the correct methodology for NO2 concentration fall off, the calculator can be downloaded from the [LAQM Website](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/no2-falloff/).  The limitations tab within the calculator should be referred to ensure only relevant sites are included within the calculator.  Please ensure the correct distances are utilised within the calculator:   * The distance from monitoring site to kerb is presented within Table B and Table C (Distance to kerb of nearest road) * The distance from receptor to kerb is the sum of Distance to kerb of nearest road and Distance from monitoring site to Relevant Exposure from Table B and Table C.   Any comments output from the calculator should be added within the comments column.  This table should be deleted if distance correction has not been completed at any site.  **Delete this box when the document is finished** |

| Site ID | Distance (m): Monitoring Site to Kerb | Distance (m): Receptor to Kerb | Monitored Concentration (Annualised and Bias Adjusted (µg m-3) | Background Concentration (µg m-3) | Concentration Predicted at Receptor (µg m-3) | Comments |
| --- | --- | --- | --- | --- | --- | --- |
| <A1> |  |  |  |  |  |  |
| <A2> |  |  |  |  |  |  |

# Appendix B Full Monthly Diffusion Tube Results for 2024

Table U. NO2 2024 Diffusion Tube Results (µg m-3)

|  |
| --- |
| **INSTRUCTIONS**  Please fill in with details of NO2 diffusion tube monitoring results. It is recommended that the [Diffusion Tube Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/) is used to process all diffusion tube data. The tab **Annual Results Summary** from the [Diffusion Tube Data Processing Tool](https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-data-processing-tool/) aligns with the diffusion tube data requirements of Table U therefore the data can be easily copied. If the tool has not been utilised, please copy across from any working spreadsheet or populate manually.  This should contain:   * Full month by month raw data (state if different exposure periods from the suggested calendar available via the LAQM website here: <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/diffusion-tube-monitoring-calendar/> * The raw data annual mean * The bias adjusted annual mean – This should also be an annualised annual mean if data capture is below 75% but greater than 25%.   The following erroneous data should have been excluded when processing the monthly diffusion tube data for the monitoring year, therefore should not be included within Table U:   * Results that have been identified as contaminated during analysis, e.g. insect(s) or dirt contained within the tube * Extreme low or high concentrations as detailed within Chapter 4, Part 2: NOX and NO2 Monitoring 4.80 of the [Technical Guidance LLAQM.TG19](https://www.london.gov.uk/sites/default/files/llaqm_technical_guidance_2019.pdf) * Results from tubes that have been exposed past the laboratory’s use by date   **Please delete this box when the document is finished** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DT ID** | **X OS Grid Ref (Easting)** | **Y OS Grid Ref (Northing)** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **June** | **Jul** | **Aug** | **Sept** | **Oct** | **Nov** | **Dec** | **Annual Mean:**  **Raw Data** | **Annual Mean: Annualised and Bias Adjusted**  **<(x.x)>** | **Annual Mean: Distance Corrected to Nearest Exposure** | **Comment** |
| <DT1> | <666555> | <333444> | <26.2> | <**42.1**> | <XX> | <XX> | <XX> | <XX> | <XX> | <26.3> | <XX> | <XX> | <XX> | <XX> | <XX> | <XX> |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**<CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM LAQM DATA PROCESSING TOOL (IF UTILISED)>**

**All erroneous data has been removed from the NO2 diffusion tube dataset presented in Table R (confirm by selecting in box).**

**Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19 (confirm by selecting in box).**

**Local bias adjustment factor used (confirm by selecting in box).**

**National bias adjustment factor used (confirm by selecting in box).**

**Where applicable, data has been distance corrected for relevant exposure in the final column (confirm by selecting in box).**

**<Local Authority> confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System** **(confirm by selecting in box).**

**Notes:**

Exceedances of the NO2 annual mean objective of 40µg m-3 are shown in **bold**.

NO2 annual means exceeding 60µg m-3, indicating a potential exceedance of the NO2 1-hour mean objective are shown in **bold and underlined**.

See [Appendix C](#_Appendix_C:_Supporting) for details on bias adjustment and annualisation.

# Appendix C Map(s) of Monitoring Locations and AQMAs

|  |
| --- |
| **INSTRUCTIONS**  Please include here one or more clear map(s) that show the location of all monitoring sites in relation to any AQMA(s, ensuring that monitoring positions are clearly labelled using the Site IDs and the mapped coordinates correspond to those presented in Table B and Table C  As for all charts within the annual report alt text should be added to comply with accessibility regulations.  **Delete this box when the document is finished** |

**Figure A. Map of Non-Automatic Monitoring Site(s)**

<Add required map(s) here>

**Figure B. Map of Automatic Monitoring Site(s)**

<Add required map(s) here>

1. LLAQM Policy and Technical Guidance 2019 (LLAQM.TG(19)) [↑](#footnote-ref-2)