Insert Local Authority Logo Here

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| **INSTRUCTIONS – PLEASE READ**This is the Annual Status Report (ASR) for submission to Defra by **30 June** of each calendar year.This template is divided into two main sections. The first, entitled “Overview of Air Quality in Our Area” provides a public-facing summary and should contain a brief overview of the state of local air quality. The rest of the document should contain the detailed technical information supporting the conclusions presented in this summary.Whilst use of this template is mandatory, this approach does not preclude the flexibility to provide detailed or extra analysis where this has taken place. For instance, appendices may be adjoined to the ASR.To facilitate the completion of the ASR, a separate Excel based template is now provided, which mirrors the tables contained within this reporting template. Local authorities are now required to submit the Excel file with all relevant tables completed via the Report Submissions Website (RSW), in addition to a MS Word or PDF copy of the completed ASR. **It is advised that local authorities complete the Excel based tables first, before then copying the completed tables in to the Word ASR template.** If particular tables are not relevant to the local authority, the reasons as to why should be indicated via the drop-down menus at the top of each Table tab.Where a conglomerate of authorities work together on air quality control, it is permissible to submit a single ASR on behalf of all the authorities.Blue boxes provide instructions and/or further information to help local authorities complete the report. These boxes should be deleted before submitting the report.Red text indicates an example or where the local authority needs to fill in information.Delete this box when the document is finished |

2019 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the

Environment Act 1995

Local Air Quality Management

Date (Month, Year)

|  |  |
| --- | --- |
| Local Authority Officer | Enter name(s) here |
| Department | Enter Department Name |
| Address | Enter Address |
| Telephone | Enter Telephone |
| E-mail | Enter email address |
| Report Reference number | Enter Report Reference |
| Date | Enter Date of Report |

# Executive Summary: Air Quality in Our Area

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| **INSTRUCTIONS**Please summarise the main findings and conclusions of the report here. This should include (but is not limited to, as could include other information you consider important): * Key news/headlines about how you’ve improved air quality in your area
* Current challenges/priorities for addressing air quality in your area
* How the public is or can get involved – e.g. walk, don’t drive; anti-idling, car sharing etc.
* 1-2 pictures of air quality initiatives in your area, if possible.

This section is designed to inform those living and working in your area about the state of local air quality, and is intended to be understood by those not familiar with the technical details of LAQM. Local authorities are (as a minimum) mandated to make this section available on their website to help promote air quality locally. This summary should also briefly outline progress on the actions that you and others, including the public, are taking or should take to improve air quality and associated health impacts. This is an opportunity to indicate whether any changes are required to your Action Plans.Any supplementary information related to air quality that the public may find useful can also be included here.Delete this box when the document is finished |

## Air Quality in <Local Authority Name>

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 and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas[[1]](#footnote-2),[[2]](#footnote-3).

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion[[3]](#footnote-4).

Include a brief summary of the main air quality issues in your local area – what are the main pollutants of concern, **what are the observed trends shown by the latest monitoring data (e.g. are levels going up or down?)**, where are the current AQMAs or hotspots (including a link to your AQMA webpage – see full list at <https://uk-air.defra.gov.uk/aqma/list>), any new major sources of emissions. Include the introduction of any new AQMAs, Action Plans or strategies. Briefly explain how your local authority works to manage local air quality and how you work with your partners, e.g. County Council, Environment Agency.

## Actions to Improve Air Quality

Include a brief summary of core actions (and in particular success stories or lessons learned) to target sources of pollution in your area over the past year, indicate any quantitative improvements from actions taken (if known), and include a summary of progress on any grant funded projects.

## Conclusions and Priorities

Summarise the conclusions from this year’s ASR, and the main actions moving forward. This can include, but is not limited to, discussion of the following: Were exceedences identified, within and outside of existing AQMAs? What were the significant trends? Are all monitoring results within AQMAs below the air quality objective, such that it may be appropriate to revoke the AQMA? Are there any new developments that will have an impact on air quality moving forward? Is there a need to update the Air Quality Action Plan?

It should be made clear what the priorities are for the local authority in addressing air quality for the coming year and briefly set out any challenges anticipated.

## Local Engagement and How to get Involved

Include text that addresses how the local authority has engaged with decision makers and the public and what the current level of interest and understanding is. Also include a brief note on how the public can help improve air quality in your area, any action groups, and where they can obtain further information.

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| **INSTRUCTIONS**This is the start of main body of the ASR, which should contain all the detailed technical information.Please:* Update Table of Contents, List of Tables and List of Figures on completion of report (select some text below> right click > update field>Update Entire Table)
* Include hyperlinks in the PDF version

Delete this box when the document is finished |

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Please delete List of Figures if not required.

# Local Air Quality Management

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| **INSTRUCTIONS**The following section is a summary of the LAQM regime in England. Please update your Local Authority’s name and the year as appropriate.Delete this box when the document is finished |

This report provides an overview of air quality in <Local Authority Name> during <year>. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) 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 pursuit of the objectives. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by <Local Authority Name> to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England can be found in Table E.1 inAppendix E.

# Actions to Improve Air Quality

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| **INSTRUCTIONS**This section provides information relating to AQMAs (section 2.1), and actions to improve air quality in these areas/in general (sections 2.2 and 2.3).Maps of AQMAs should be available at <https://uk-air.defra.gov.uk/aqma/list>. **However please make sure you review the maps and associated information on the website and ensure these are up-to-date**. Please also fill out Table 2.1 with information pertaining to each AQMA in your area.An additional map including all monitoring locations relative to these AQMA(s) must also be included in Appendix D, so that monitoring results within each AQMA can be easily identified. Even if no AQMA has been declared, a map of monitoring locations should be included in Appendix D. If one or more AQMAs have been declared and an AQAP has been published, please provide in section 2.2 details on progress made to implement each of the AQAP measures. Please also indicate when any relevant AQAPs were developed and/or most recently updated in Table 2.2.If no AQMA is declared, but an Air Quality Strategy or other document has been prepared, you should provide link(s) to the relevant document(s). If action on air quality is being addressed through other plans, e.g. Local Transport Plans or climate change strategies, please indicate here with links and any progress. If any information does not fit within Table 2.2, please provide further information below the table including:* Key actions completed, in progress or planned since last year, and outcomes in terms on benefits for air quality
* Any difficulties encountered / why measures have not been progressed, and if measures have slipped, how this will be addressed
* Forecast progress up to next year’s Annual Status Report
* An indication of main funding sources for the measures, e.g. if the local authority has acquired a Defra Air Quality Grant

Local authorities in England no longer have to report on 1,3-Butadiene, Benzene, Carbon Monoxide and Lead, but if you have decided to report on these pollutants, then state clearly which pollutant and why.In Section 2.2, please also indicate what conclusions have been brought forward from last year’s appraisal and actioned in this ASR.In Section 2.3, local authorities are now asked to work towards reducing levels of PM2.5 (fine particulates). You should use this section to briefly set out how your authority has decided to do this, why and what measures are being taken – further information is provided in LAQM policy and technical guidance.Delete this box when the document is finished |

## 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 must prepare an Air Quality Action Plan (AQAP) within 12-18 months setting out measures it intends to put in place in pursuit of compliance with the objectives.

**Amend the following as necessary:**

A summary of AQMAs declared by <Local Authority Name> can be found in Table 2.1. Further information related to declared or revoked AQMAs, including maps of AQMA boundaries are available online at <insert link to local authority’s AQMA webpage – this should look like <https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=xxx> – see full list at <https://uk-air.defra.gov.uk/aqma/list>>. Alternatively, see Appendix D: Map(s) of Monitoring Locations and AQMAs, which provides for a map of air quality monitoring locations in relation to the AQMA(s).

Or:

<Local Authority Name> currently does not have any AQMAs. <insert reference to air quality strategy or similar document>. For reference, a map of <Local Authority Name>’s monitoring locations is available in Appendix D.

Add text if necessary: We propose to declare a new AQMA in <x> area (see monitoring section).

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

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

Table 2.1 – Declared Air Quality Management Areas

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| **INSTRUCTIONS**Please fill in Table 2.1 as per the following:* AQMA Name = Official declared name of AQMA.
* Date of Declaration = The date of the original declaration, and of any subsequent amendments.
* 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.
* City / Town = Main area the AQMA is within. If rural, indicate region or nearest town.
* One Line Description = A brief description of the characteristics of the AQMA.
* Is air quality within the AQMA influenced by Highways England roads? = Yes/No. This may include emissions from Motorways, Urban Expressways, Dual carriageways, major trunk roads.
* Level of Exceedance = Highest pollutant concentration at point of relevant exposure, i.e. following NO2 fall off with distance correction (if applicable).

 At Declaration – Monitored/modelled information that led to a declaration. Now – Latest Monitored/modelled information of current situation in AQMA for that pollutant.* Action Plan (Name / Date of Publication / Link) = Name/Title of action plan, the date it was published, also including a link to where the public can attain this plan, if available.

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|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **AQMA Name** | **Date of Declaration** | **Pollutants and Air Quality Objectives** | **City / Town** | **One Line Description** | **Is air quality in the AQMA influenced by roads controlled by Highways England?** | **Level of Exceedance (maximum monitored/modelled concentration at a location of relevant exposure)** | **Action Plan** |
| **At Declaration** | **Now** | **Name** | **Date of Publication** | **Link** |
| AQMA Name 1 | Declared <Date>, Amended <Date> | Select | Name | E.g. An area encompassing a number of properties at the junction of road 1 and road 2. | YES/NO | 41 | Select Units | 40 | Select Units | E.g. Action Plan for AQMA Name 1 | E.g. 2015 | E.g. www. |
| AQMA Name 1 | Declared <Date>, Amended <Date> | Select | Name | E.g. An area encompassing a number of properties at the junction of road 1 and road 2. | YES/NO | 55 | Select Units | 59 | Select Units | E.g. Action Plan for AQMA Name 1 | E.g. 2015 | E.g. www. |
| AQMA Name 2 | Declared <Date>, Amended <Date> | Select | Name | 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 | Select Units | 21 | Select Units | E.g. Action Plan for AQMA Name 2 | E.g. 2017 | E.g. http:// |

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[ ]  **<Local Authority> confirm the information on UK-Air regarding their AQMA(s) is up to date (confirm by selecting in box)**

##

## Progress and Impact of Measures to address Air Quality in <Local Authority Name>

Defra’s appraisal of last year’s ASR concluded <Insert main comments from previous appraisal and indicate how these have been addressed this year>.

<Local Authority Name> has taken forward a number of direct measures during the current reporting year of <XXXX> in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2.

More detail on these measures can be found in their respective Action Plans <insert names of other plans or strategies if appropriate>. Key completed measures are: <set out bullet of main measures below and any key outcomes from these – keep text brief>.

Amend as appropriate:

<Local Authority Name> expects the following measures to be completed over the course of the next reporting year: <set out measures and brief explanation of expected impact of these measures>. <Local Authority Name>’s priorities for the coming year are <set out briefly with explanation>.

The principal challenges and barriers to implementation that <Local Authority Name> anticipates facing are <set out briefly with explanation>.

Progress on the following measures has been slower than expected due to: <insert explanation>.

Delete as appropriate:

<Local Authority Name> anticipates that the measures stated above and in Table 2.2 will achieve compliance in <AQMA Name(s)>.

Whilst the measures stated above and in Table 2.2 will help to contribute towards compliance, <Local Authority Name> anticipates that further additional measures not yet prescribed will be required in subsequent years to achieve compliance and enable the revocation of <AQMA Name(s)>.

Table 2.2 – Progress on Measures to Improve Air Quality

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **INSTRUCTIONS**Please fill in Table 2.2 (Progress on Measures to Improve Air Quality) below to reflect each measure implemented**Measures should be ordered in terms of their expected efficacy, i.e. the most effective measure first, least effective measure last.**For the Lead organisation and funding source column, please indicate the organisations or departments involved with the measure, including any information on collaboration, and the source of the funding supporting the measure. For the KPI column, please also indicate (if relevant) if these have been met to date.The “EU Category” and “EU Classification” columns should be populated based on the following options, to be consistent with the National Air Quality Plans:

|  |  |
| --- | --- |
| EU Measure Category | EU Measure Classification |
| Alternatives to private vehicle use | Bus based Park & Ride |
| Car & lift sharing schemes |
| Car Clubs |
| Rail based Park & Ride |
| Other |
| Environmental Permits | Introduction/increase of environment charges through permit systems and economic instruments |
| Introduction/increase of environmental funding through permit systems and economic instruments |
| Large Combustion Plant Permits and National Plans going beyond BAT |
| Measures to reduce pollution through IPPC Permits going beyond BAT |
| Other measure through permit systems and economic instruments |
| Tradable permit system through permit systems and economic instruments |
| Other |
| Freight and Delivery Management | Delivery and Service plans |
| Freight Consolidation Centre |
| Freight Partnerships for city centre deliveries |
| Quiet & out of hours delivery |
| Route Management Plans/ Strategic routing strategy for HGV's |
| Other |
| Policy Guidance and Development Control | Air Quality Planning and Policy Guidance |
| Low Emissions Strategy |
| Other policy |
| Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality |
| Sustainable Procurement Guidance |
| Promoting Low Emission Plant | Emission control equipment for small and medium sized stationary combustion sources / replacement of combustion sources |
| Low Emission Fuels for stationary and mobile sources in Public Procurement |
| Other measure for low emission fuels for stationary and mobile sources |
| Public Procurement of stationary combustion sources |
| Regulations for fuel quality for low emission fuels for stationary and mobile sources |
| Shift to installations using low emission fuels for stationary and mobile sources |
| Other Policy |
| Promoting Low Emission Transport | Company Vehicle Procurement -Prioritising uptake of low emission vehicles |
| Low Emission Zone (LEZ) |
| Priority parking for LEV's |
| Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging |
| Public Vehicle Procurement -Prioritising uptake of low emission vehicles |
| Taxi emission incentives |
| Taxi Licensing conditions |
| Other |
| Promoting Travel Alternatives | Encourage / Facilitate home-working |
| Intensive active travel campaign & infrastructure |
| Personalised Travel Planning |
| Promote use of rail and inland waterways |
| Promotion of cycling |
| Promotion of walking |
| School Travel Plans |
| Workplace Travel Planning |
| Other |
| Public Information | Via leaflets |
| Via other mechanisms |
| Via radio |
| Via television |
| Via the Internet |
| Other |
| Traffic Management | Anti-idling enforcement |
| Emission based parking or permit charges |
| Reduction of speed limits, 20mph zones |
| Road User Charging (RUC)/ Congestion charging |
| Strategic highway improvements, Re-prioritising road space away from cars, including Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane |
| Testing Vehicle Emissions |
| UTC, Congestion management, traffic reduction |
| Workplace Parking Levy, Parking Enforcement on highway |
| Other |
| Transport Planning and Infrastructure | Bus route improvements |
| Cycle network |
| Public cycle hire scheme |
| Public transport improvements-interchanges stations and services |
| Other |
| Vehicle Fleet Efficiency | Driver training and ECO driving aids |
| Fleet efficiency and recognition schemes |
| Promoting Low Emission Public Transport |
| Testing Vehicle Emissions |
| Vehicle Retrofitting programmes |
| Other |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Measure No.** | **Measure** | **EU Category** | **EU Classification** | **Organisations involved and Funding Source** | **Planning Phase** | **Implementation Phase** | **Key Performance Indicator** | **Reduction in Pollutant / Emission from Measure** | **Progress to Date** | **Estimated / Actual Completion Date** | **Comments / Barriers to implementation** |
| 1 | Title | Select from the available categories | Select from the available classifications | Local Authority, Funding: Defra Air Quality Grant | Date | Date | % of x.. | 2% | Funding secured, planning phase | Date | Lengthy Timescale |
| 2 | Title | Select from the available categories | Select from the available classifications | Lead + Funded: Local Authority Environmental Health | Date | Date | # of y.. | 0.2 µg/m3 | Implementation on-going | Date | Funding |
| 3 | Title | Select from the available categories | Select from the available classifications | Local Authority Environmental Health, Local Authority Transport Dept.  | Date | Date | Measured Concentration at z… | Reduced vehicle emissions | Implementation on-going | Date | First phase successful, second phase on-going |

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## PM2.5 – Local Authority Approach to Reducing Emissions and/or Concentrations

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| **INSTRUCTIONS**Briefly set out how you have chosen to interpret the requirement to work towards reducing PM2.5 in your local area as set out in LAQM Policy Guidance and why. This can include information regarding any smoke control areas in your local area, and measures being implemented within these.Please then set down any measures that you are taking or planning and whether they have links to the Public Health Outcomes Framework. Further guidance is available under the PM2.5 and Action Planning section of [Technical Guidance LAQM.TG16](https://laqm.defra.gov.uk/technical-guidance/index.html) (Chapter 2).Unless this approach changes, this text is likely to remain standard in future years.Delete this box when the document is finished |

As detailed in Policy Guidance LAQM.PG16 (Chapter 7), local authorities are expected to work towards reducing emissions and/or concentrations of PM2.5 (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that PM2.5 has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

<Local Authority Name> is taking the following measures to address PM2.5: <insert text – include whether new or existing measures (please refer to specific number of measures in the Progress Report on Action Plans in the section above) that may also be addressing other pollutants as well and any partnership working. Can also include information regarding Smoke Control Areas.>

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

## Summary of Monitoring Undertaken

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| **INSTRUCTIONS**Please include a brief summary of monitoring data in this section, with an explanation of any changes in the past 12 months and if those changes have led to the declaration of an AQMA, a decision to amend or revoke an AQMA, or informed an appropriate local strategy. Also include the level of exceedance in comparison with national/EU Limit Values. The tabular details should be supplied in an Appendix and/or link. In addition, local authorities should consider adding a graph to demonstrate historic trends in the monitoring data. **To improve transparency, local authorities with AQMAs may wish to consider aligning the presentation of monitoring information in this section with the individual AQMAs.**If changes have led to a decision to declare an AQMA, please indicate whether you are moving to immediate declaration (i.e. Fast Tack AQMA declaration) or whether you have decided to seek additional evidence before declaration; and indicate what that is and timescales (taking into account LAQM Guidance). Any extra information should be placed in Appendix C.If any change to your monitoring strategy has been made during the past 12 months or is planned, briefly set out here and explain why.Please ensure that at least one clearly labelled map of all monitoring locations within any AQMA (showing the AQMA boundary), is included in Appendix D, with monitoring site IDs consistent with those provided in the relevant tables in Appendix A.Table A.1 and Table A.2 in Appendix A should be populated to include the details of all automatic (continuous) and non-automatic monitoring sites. Delete this box when the document is finished |

### Automatic Monitoring Sites

This section sets out what monitoring has taken place and how it compares with objectives.

<Local Authority Name> undertook automatic (continuous) monitoring at <X> sites during <year>. Table A.1 in Appendix A shows the details of the sites. NB. Local authorities do not have to report annually on the following pollutants: 1,3 butadiene, benzene, carbon monoxide and lead, unless local circumstances indicate there is a problem. National monitoring results are available at <please insert link>.

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

### Non-Automatic Monitoring Sites

<Local Authority Name> undertook non- automatic (passive) monitoring of NO2 at <X> sites during <year>. Table A.2 in Appendix A shows the details of the sites.

Maps showing the location of the monitoring sites are provided in <Appendix D/or link>. 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

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| **INSTRUCTIONS**You may wish to include any trend data from previous years, showing any increasing or decreasing trends (5 years data is usually considered the minimum necessary to identify a significant trend). Trend graph figure captions for each pollutant have been included. Any apparent trends in this data should be discussed. When trends/results are presented in a graph, please indicate clearly in the graph the relevant objectives for that pollutant so that conclusions can be drawn easily by members of the public.Delete this box when the document is finished |

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, “annualisation” and distance correction. Further details on adjustments are provided in Appendix C.

### Nitrogen Dioxide (NO2)

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| **INSTRUCTIONS**Comment on whether there are exceedances of the air quality objectives for NO2 and whether they occur within or outside AQMAs.If a concentration is above the air quality objectives for NO2 but was measured at a monitoring site which is not representative of public exposure, please use the procedure specified in Paragraphs 7.77-7.79 of LAQM.TG16 to estimate the concentration at the nearest receptor, and discuss these results. State clearly that all monitoring data presented has been properly ratified and corrected for bias where applicable. This should also include distance correction to the nearest receptor, if required.Monitoring data should be included in Table A.3 and Table A.4 in Appendix A, and Table B.1 of Appendix B. **Ensure the Site IDs match those provided in Column A of Table A.1 and Table A.2.**Note, the entered monitored values in Table A.3 and those illustrated in Figure A.1 should be those at the location of the monitoring site (bias adjusted and annualised, as required), not those following any fall off with distance correction.You should state whether the information led to the declaration of an AQMA, including the main points/trends coming out of the data – e.g. where are the exceedances or areas of concern?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 D.Delete this box when the document is finished |

Table A.3 in Appendix A compares the ratified and adjusted monitored NO2 annual mean concentrations for the past 5 years with the air quality objective of 40µg/m3.

For diffusion tubes, the full <most recent year of data> dataset of monthly mean values is provided in Appendix B.

Table A.4 in Appendix A compares the ratified continuous monitored NO2 hourly mean concentrations for the past 5 years with the air quality objective of 200µg/m3, not to be exceeded more than 18 times per year.

Briefly describe any exceedances of the air quality objectives here, considering annual means greater than 60µg/m3, which indicates that an exceedance of the 1-hour mean objective is also likely at these sites.

### Particulate Matter (PM10)

|  |
| --- |
| **INSTRUCTIONS**If PM10 monitoring is available, then provide tables of results.Comment on whether there are exceedances of the air quality objectives for PM10 and whether they occur within or outside AQMAs.Also flag if there are concentrations above the air quality objectives for PM10 measured at monitoring sites which are not representative of public exposure.Monitoring data should be included in Table A.5 and Table A.6 in Appendix A. **Ensure the Site IDs match those provided in Column A of Table A.1.**You should state whether the information led to the declaration of an AQMA, including the main points/trends coming out of the data – e.g. where are the exceedances or areas of concern?State clearly that all monitoring data presented has been properly ratified.If you don’t monitor PM10, please delete this section.Delete this box when the document is finished |

Table A.5 in Appendix A compares the ratified and adjusted monitored PM10 annual mean concentrations for the past 5 years with the air quality objective of 40µg/m3.

Table A.6 in Appendix A compares the ratified continuous monitored PM10 daily mean concentrations for the past 5 years with the air quality objective of 50µg/m3, not to be exceeded more than 35 times per year.

Briefly describe any exceedances of the air quality objectives here.

### Particulate Matter (PM2.5)

|  |
| --- |
| **INSTRUCTIONS**Although not covered by the LAQM regulations, if you carry out monitoring of PM2.5, please report it here. This may be useful as PM2.5 is the pollutant which has the biggest impact on public health and on which the Public Health Outcomes Framework (PHOF) indicator is based.Monitoring data should be included in Table A.7 in Appendix A. **Ensure the Site IDs match those provided in Column A of Table A.1.**State clearly that all monitoring data presented has been properly ratified.If you use other methods to evaluate local PM2.5, rather than local monitoring, please delete this section.Delete this box when the document is finished |

Table A.7 in Appendix A presents the ratified and adjusted monitored PM2.5 annual mean concentrations for the past 5 years.

Briefly describe the concentration results here.

### Sulphur Dioxide (SO2)

|  |
| --- |
| **INSTRUCTIONS**If SO2 monitoring is available then provide a table of results.Comment on whether there are exceedances of the air quality objectives for SO2 and whether they occur within or outside AQMAs.Flag if there are concentrations above the air quality objectives for SO2 measured at monitoring sites which are not representative of public exposure.Monitoring data should be included in Table A.8 in Appendix A. **Ensure the Site IDs match those provided in Column A of Table A.1.**You should state whether the information led to the declaration of an AQMA, including the main points/trends coming out of the data – e.g. where are the exceedances or areas of concern?State clearly that all monitoring data presented has been properly ratified.If you don’t monitor SO2, please delete this section.Delete this box when the document is finished |

Table A.8 in Appendix A compares the ratified continuous monitored SO2 concentrations for <year> with the air quality objectives for SO2.

Briefly describe any exceedances of the air quality objectives here.

# Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Site ID** | **Site Name** | **Site Type** | **X OS Grid Ref** | **Y OS Grid Ref** | **Pollutants Monitored** | **In AQMA?** | **Monitoring Technique** | **Distance to Relevant Exposure (m) (1)** | **Distance to kerb of nearest road (m) (2)** | **Inlet Height (m)** |
| CM1 | Name1 | Select | 332395 | 433175 | NO2; PM10 | YES/NO | Chemiluminescent; FDMS | 5 | 3 | 1.5 |
| CM2 | Name2 | Select | 332200 | 433540 | NO2 | YES/NO | Chemiluminescent | 0 | N/A | 1.5 |

**CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM EXCEL TEMPLATE**

**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 – Details of Non-Automatic Monitoring Sites

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Site ID** | **Site Name** | **Site Type** | **X OS Grid Ref** | **Y OS Grid Ref** | **Pollutants Monitored** | **In AQMA?** | **Distance to Relevant Exposure (m) (1)** | **Distance to kerb of nearest road (m) (2)** | **Tube collocated with a Continuous Analyser?** | **Height (m)** |
| DT1 | Name1 | Select | 332395 | 433175 | NO2 | YES/NO | 1 | 3 | YES/NO | 1.5 |
| DT2 | Name2 | Select | 332395 | 433175 | NO2 | YES/NO | 3 | 1 | YES/NO | 2.0 |

**CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM EXCEL TEMPLATE**

**Notes:**

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on/adjacent to the façade of a residential property).

(2) N/A if not applicable.

Table A.3 – Annual Mean NO2 Monitoring Results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Site ID** | **Site Type** | **Monitoring Type** | **Valid Data Capture for Monitoring Period (%) (1)** | **Valid Data Capture 2018 (%) (2)** | **NO2 Annual Mean Concentration (µg/m3) (3)** |
| **2014** | **2015** | **2016** | **2017** | **2018** |
| CM1 | Select | Select | 95 | 95 | **61** | **48.1** | **44.1** | **43.2** | **41.2** |
| CM2 | Select | Select | 100 | 50 | 27 | 28.2 | 31.5 | 27.8 | 24.2 |
| DT1 | Select | Select | 75 | 75 | **61** | **48.1** | **44.1** | **43.2** | **46.6** |

**CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM EXCEL TEMPLATE**

[ ]  **Diffusion tube data has been bias corrected (confirm by selecting in box)**

[ ]  **Annualisation has been conducted where data capture is <75% (confirm by selecting in box)**

**Notes:**

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

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

(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%).

(3) Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per Boxes 7.9 and 7.10 in LAQM.TG16 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Figure A.1 – Trends in Annual Mean NO2 Concentrations

<Delete if not required>

Table A.4 – 1-Hour Mean NO2 Monitoring Results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Site ID** | **Site Type** | **Monitoring Type** | **Valid Data Capture for Monitoring Period (%) (1)** | **Valid Data Capture 2018 (%) (2)** | **NO2 1-Hour Means > 200µg/m3 (3)** |
| **2014** | **2015** | **2016** | **2017** | **2018** |
| CM1 | Select | Automatic | 95 | 95 | **19** | 11 | 12 | 15 | **30** |
| CM2 | Select | Automatic | 80 | 80 | **-** | **-** | **-** | **22 (235)** | **28**  |

**CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM EXCEL TEMPLATE**

**Notes:**

Exceedances of the NO2 1-hour mean objective (200µg/m3 not to be exceeded more than 18 times/year) are shown in **bold.**

(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%).

(3) If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

Figure A.2 – Trends in Number of NO2 1-Hour Means > 200µg/m3

<Delete if not required>

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Site ID | **Site Type** | **Valid Data Capture for Monitoring Period (%) (1)** | **Valid Data Capture 2018 (%) (2)** | **PM10 Annual Mean Concentration (µg/m3) (3)** |
| **2014** | **2015** | **2016** | **2017** | **2018** |
| CM1 | Select | 95 | 95 | **61** | **48.1** | **44.1** | **43.2** | **41.4** |
| CM2 | Select | 100 | 50 | 27 | 28.2 | 31.5 | 27.8 | 30.5 |

**CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM EXCEL TEMPLATE**

[ ]  **Annualisation has been conducted where data capture is <75% (confirm by selecting in box)**

**Notes:**

Exceedances of the PM10 annual mean objective of 40µg/m3 are shown in **bold.**

(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%).

(3) All means have been “annualised” as per Boxes 7.9 and 7.10 in LAQM.TG16, valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Figure A.3 – Trends in Annual Mean PM10 Concentrations

<Delete if not required>

Table A.6 – 24-Hour Mean PM10 Monitoring Results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site ID** | **Site Type** | **Valid Data Capture for Monitoring Period (%) (1)** | **Valid Data Capture 2018 (%) (2)** | **PM10 24-Hour Means > 50µg/m3 (3)** |
| **2014** | **2015** | **2016** | **2017** | **2018** |
| CM1 | Select | 95 | 95 | **36** | 26 | 22 | 29 | 21  |
| CM2 | Select | 80 | 80 | **-** | **-** | **-** | **36 (55)** | 20 |

**CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM EXCEL TEMPLATE**

**Notes:**

Exceedances of the PM10 24-hour mean objective (50µg/m3 not to be exceeded more than 35 times/year) are shown in **bold.**

(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%).

(3) If the period of valid data is less than 85%, the 90.4th percentile of 24-hour means is provided in brackets.

Figure A.4 – Trends in Number of 24-Hour Mean PM10 Results >50µg/m3

<Delete if not required>

Table A.7 – PM2.5 Monitoring Results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site ID** | **Site Type** | **Valid Data Capture for Monitoring Period (%) (1)** | **Valid Data Capture 2018 (%) (2)** | **PM2.5 Annual Mean Concentration (µg/m3) (3)** |
| **2014** | **2015** | **2016** | **2017** | **2018** |
| CM1 | Select | 95 | 95 | 61 | 48.1 | 44.1 | 43.2 | 48.1 |
| CM2 | Select | 100 | 50 | 27 | 28.2 | 31.5 | 27.8 | 28.2 |

**CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM EXCEL TEMPLATE**

[ ]  **Annualisation has been conducted where data capture is <75% (confirm by selecting in box)**

**Notes:**

(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%).

(3) All means have been “annualised” as per Boxes 7.9 and 7.10 in LAQM.TG16, valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Figure A.5 – Trends in Annual Mean PM2.5 Concentrations

<Delete if not required>

Table A.8 – SO2 Monitoring Results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site ID** | **Site Type** | **Valid Data Capture for monitoring Period (%) (1)** | **Valid Data Capture 2018 (%) (2)** | **Number of Exceedances 2018** |
| **(percentile in bracket) (3)** |
| **15-minute Objective (266 µg/m3)** | **1-hour Objective (350 µg/m3)** | **24-hour Objective (125 µg/m3)** |
| CM1 | Select | 98 | 94 | 4 | 1 | 0 |
| CM2 | Select | 100 | 90 | 1 | 0 | 0 |

**CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM EXCEL TEMPLATE**

**Notes:**

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)

(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%).

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

Figure A.6 – Trends in SO2 Concentrations

<Delete if not required>

# Appendix B: Full Monthly Diffusion Tube Results for 2018

Table B.1 – NO2 Monthly Diffusion Tube Results - 2018

|  |
| --- |
| **INSTRUCTIONS**Please fill in Table B.1 with details of NO2 diffusion tube monitoring results. 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/diffusion-tubes/data-entry.html>)
* The raw data annual mean
* The bias adjusted annual mean – This should also be an annualised annual mean if data capture is below 75%.
* The distance corrected annual mean – If the location is not relevant to public exposure and meets the criteria specified in para 7.78 of TG16. If the monitoring location is relevant to annual mean public exposure, please leave the final column blank or add a dash.

**Ensure the Site IDs match those provided in Column A of Table A.2.**Please delete this box when the document is finished |

|  |  |
| --- | --- |
| **Site ID** | **NO2 Mean Concentrations (µg/m3)** |
| **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** | **Annual Mean** |
| **Raw Data** | **Bias Adjusted (factor) and Annualised (1)** | **Distance Corrected to Nearest Exposure (2)** |
| DT1 | 36.0 | 42.1 | - | - | 59.1 | 52.9 | - | 47.0 | 55.0 | 38.4 | 45.2 | 46.8 | 46.9 | **42.3** | **41.2** |
| DT2 | 35.7 | 23.3 | 19.7 | 17.1 | 18.2 | 19.5 | 25.7 | 17.0 | 27.0 | 19.0 | 33.0 | 27.6 | 23.6 | 21.2 | 21.2 |

**CLICK HERE THEN PASTE COMPLETED DATA ROWS FROM EXCEL TEMPLATE**

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

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

[ ]  **Annualisation has been conducted where data capture is <75% (confirm by selecting in box)**

[ ]  **Where applicable, data has been distance corrected for relevant exposure (confirm by selecting in box)**

**Notes:**

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

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

(1) See Appendix C for details on bias adjustment and annualisation.

(2) Distance corrected to nearest relevant public exposure.

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

|  |
| --- |
| **INSTRUCTIONS**Please include here any additional information required to support the ASR. This may include:* Indication, if necessary, of any significant changes to sources, and therefore any screening assessment of identified new or changed sources of pollution based on DMRB, biomass and industrial screening tools, etc (see Chapter 7 in Technical Guidance LAQM.TG16). Outline whether this has resulted / will result in any change to monitoring or a Fast Track AQMA declaration.
* Reporting of any detailed dispersion modelling of emissions, or results of monitoring campaigns carried out to determine whether an AQMA needs to be declared, amended or revoked.
* A summary of any additional evidence gathered or being gathered in support of measures for Action Plans and links to any final reports.
* QA/QC on monitoring data, including bias adjustments, annualisation and distance correction, as appropriate. **Distance correction is an important point to consider if your monitoring sites are not representative of public exposure (e.g. if located at roadside or kerbside, but with façades of nearest properties set back further from the road).**
* Discussion on the choice of bias correction factor applied for diffusion tubes, giving due consideration to the discussion in Box 7.11 of LAQM.TG16.
* Discussion on the annualisation process, which is given in Boxes 7.9 and 7.10 of LAQM.TG16.
* Details of distance correction using the NO2 fall off with distance calculator available on the LAQM website and discussed in Paragraphs 7.77-7.79 of LAQM.TG16.

Delete this box when the document is finished |

Add required additional information here.

# Appendix D: 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) and, if appropriate, the local authority boundary, ensuring that monitoring positions are clearly labelled using the Site IDs corresponding to Column A of Tables A1 and A2.Delete this box when the document is finished |

Add required maps here.

# Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England

| **Pollutant** | **Air Quality Objective[[4]](#footnote-5)** |
| --- | --- |
| **Concentration** | **Measured as** |
| Nitrogen Dioxide (NO2) | 200 µg/m3 not to be exceeded more than 18 times a year | 1-hour mean |
| 40 µg/m3 | Annual mean |
| Particulate Matter (PM10) | 50 µg/m3, not to be exceeded more than 35 times a year | 24-hour mean |
| 40 µg/m3 | Annual mean |
| Sulphur Dioxide (SO2) | 350 µg/m3, not to be exceeded more than 24 times a year | 1-hour mean |
| 125 µg/m3, not to be exceeded more than 3 times a year | 24-hour mean |
| 266 µg/m3, not to be exceeded more than 35 times a year | 15-minute mean |

# Glossary of Terms

Please add a description of any abbreviations included in the ASR – An example is provided below.

|  |  |
| --- | --- |
| **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 | Air quality Annual Status Report |
| Defra | Department for Environment, Food and Rural Affairs |
| DMRB | Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England |
| EU | European Union |
| FDMS | Filter Dynamics Measurement System |
| LAQM | Local Air Quality Management |
| NO2 | Nitrogen Dioxide |
| NOx | Nitrogen Oxides |
| PM10 | Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less |
| PM2.5 | Airborne particulate matter with an aerodynamic diameter of 2.5µm or less |
| QA/QC | Quality Assurance and Quality Control |
| SO2 | Sulphur Dioxide |
| … | … |

# References

Add references here.

1. Environmental equity, air quality, socioeconomic status and respiratory health, 2010 [↑](#footnote-ref-2)
2. Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006 [↑](#footnote-ref-3)
3. Defra. Abatement cost guidance for valuing changes in air quality, May 2013 [↑](#footnote-ref-4)
4. The units are in microgrammes of pollutant per cubic metre of air (µg/m3). [↑](#footnote-ref-5)