



Department
for Environment
Food & Rural Affairs

Part IV of the Environment Act 1995

Local Air Quality Management Policy Guidance (PG16)

April 2016





© Crown copyright 2016

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v.3. To view this licence visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3/ or email PSI@nationalarchives.gsi.gov.uk

This publication is available at <http://laqm.defra.gov.uk>

Any enquiries regarding this publication should be sent to us at

Defra

Area 2C, Nobel House

17 Smith Square

London

SW1P 3JR

Email: air.quality@defra.gsi.gov.uk

www.gov.uk/defra

Table of Contents

Chapter 1: Introduction	1
Who is This Guidance For?	1
Why Air Quality Matters	2
Chapter 2: Local Air Quality Management Process – An Overview of Reporting	3
The LAQM Review and Assessment Process	4
Annual Status Report	4
Appraisal Process	5
Local Air Quality Strategies	5
Steering Group	5
Chapter 3: LAQM - Roles and Responsibilities	7
Two-Tier Authorities	7
District Authorities	7
County Councils	8
Sharing of Data	9
Disagreements between District and County Councils	9
Unitary Authorities	9
Chapter 4: Air Quality Management Areas	10
Declaring AQMAs – Setting Boundaries and Tackling Uncertainty	10
Option to Fast-Track AQMAs	11
Revoking or Amending an AQMA	11
Chapter 5: Air Quality Action Plans	13
Ownership and Accountability	13
Chapter 6: Consultation	15
Chapter 7: PM_{2.5} and Public Health	16
Public Health Outcomes Framework (PHOF) – Healthy Lives; Healthy People	16
PM _{2.5} Indicator	17
Local Authority Role in Reducing Levels of PM _{2.5}	18
Interpretation of PM _{2.5} Role (for Reporting Purposes)	18
Local Authority Measures to Reduce PM _{2.5}	19
Roles and Responsibilities under PHOF	19
Directors of Public Health	19
Local Authorities (Including Transport and Planning Departments)	20
Chapter 8: Transport	21
Introduction	21
Transport Planning	21
Local Authority Measures	21
Access Control to Encourage Cleaner Vehicles	22
Promoting Travel Alternatives – Behaviour Change	22

Smarter Choices.....	23
Traffic Schemes	24
Speed Limits.....	24
Intelligent Traffic Management	25
Cleaner Vehicle Technology.....	25
Promoting Low Emission Transport.....	25
Evaluating the Benefits of Transport Measures.....	28
Chapter 9: Planning and Building Regulations	29
National Planning Policy and Guidance	29
Building Regulations.....	29
Part 2: Further Guidance	30
Defra Local Air Quality Management	30
Defra UK Air website	30
LAQM Support Helpdesk	30
Planning and Development Guidance	30
Glossary of Terms	32
Annex A: Air Quality Objectives Contained in the Air Quality (England) Regulations 2000 (2002 as Amended).....	33
Annex B: Example Air Quality Management Area Order	34

Chapter 1: Introduction

- 1.1. Local authorities have a central role in achieving improvements in air quality. Their local knowledge and interaction with the communities that they serve mean that they are better able to know the issues on the ground in detail and the solutions that may be necessary or appropriate to the locality.
- 1.2. Through the Local Air Quality Management (LAQM) system local authorities are required to assess air quality in their area and designate Air Quality Management Areas (AQMAs) if improvements are necessary. Where an AQMA is designated, local authorities are required to produce an air quality Action Plan describing the pollution reduction measures it will put in place.
- 1.3. Currently, over 700 active AQMAs have been designated across UK local authorities, mostly for Nitrogen Dioxide (NO₂). England accounts for nearly 600 AQMAs. Action Plans have been put in place to address air quality, including any exceedances.
- 1.4. This guidance has been designed to maximise the public health benefits of local authority action, in particular on priority pollutants such as NO₂ and Particulate Matter (PM₁₀/PM_{2.5}). A key element in streamlining the LAQM process is that while the quality of information is retained, the requirements are more consistent and less burdensome and enable local authorities to clearly point to the actions that are being or will be taken.

Who is This Guidance For?

- 1.5. This guidance relates to local authorities in England only, excluding those in London who will be provided guidance separately by the Mayor of London. Supervision of the LAQM system in Greater London has been devolved to the Mayor of London, to whom powers to intervene and direct boroughs have been given under Part IV of the Environment Act 1995. The Secretary of State expects London boroughs to participate in the Mayor's London LAQM framework and have regard to any advice or guidance issued by the Mayor of London as to the performance of their functions under LAQM.
- 1.6. This guidance is statutory and all relevant Local Authorities (both district and county level) should have regard to it. The guidance applies to local authority action on air quality using available levers, including planning and transport responsibilities. In two tier authorities, it is directly relevant to both district and county councils who both have obligations under Part IV of the Environment Act (more information is set out in Chapter 3). It is also relevant to any external organisations who may wish to engage with the local authority to assist in the delivery of their statutory duties on managing air quality.

Why Air Quality Matters

- 1.7. Through improving air quality we can reduce both the short term and the long term effects on people's health. It will have benefits to those who may find their conditions are made worse through exposure to air pollution, for example people with heart or lung conditions or breathing problems.
- 1.8. The evidence associating NO₂ with health effects has strengthened substantially in recent years, as noted by the Committee on the Medical Effects of Air Pollutants (COMEAP)¹. It is estimated that the effects of NO₂ on mortality are equivalent to 23,500 deaths in the UK annually². Many of the sources of NO₂ are also sources of particulate matter (PM). The impact of exposure to particulate matter pollution (PM_{2.5}) is estimated to have an effect on mortality equivalent to nearly 29,000 deaths in the UK³. The combined impact of these two pollutants represents a significant public health challenge.
- 1.9. Improving air quality will also reduce damage to water quality, biodiversity and crops. Oxides of Nitrogen can contribute to eutrophication of waterways affecting aquatic life. They can react in the atmosphere with volatile organic compounds to create ground level ozone which damages crops as well as having its own health impacts.
- 1.10. Tackling air pollution is a priority for Government. Action being taken to reduce NO₂ concentrations is set out in the Air quality plan for nitrogen dioxide (NO₂) in the UK⁴. We will achieve this by exploiting new, clean technologies, such as electric and ultra-low emission vehicles, to cut emissions and help our towns and cities function more smartly and efficiently. To spur further innovation we have opened up our data so that the whole country – people, businesses and the public sector – can use it to take better decisions and action. Local authorities have a key role to play delivering targeted pollution reduction measures at a local level.

¹ [Statement on the evidence for the effects of nitrogen dioxide on health](#)

² Defra analysis using interim recommendations from COMEAP's working group on NO₂. The working group made an interim recommendation for a coefficient to reflect the relationship between mortality and NO₂ concentrations (per µg/m³). COMEAP has not yet made any estimates of the effects of NO₂ on mortality. Any analysis will be subject to change following further analysis by the working group and consultation with the full committee.

³ [The Mortality Effects of Long-Term Exposure to Particulate Air Pollution in the United Kingdom](#)

⁴ <https://www.gov.uk/government/collections/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2015>

Chapter 2: Local Air Quality Management Process – An Overview of Reporting

- 2.1 This chapter provides an overview of the LAQM process in England (excluding London). The Technical Guidance on LAQM (LAQM.TG16)⁵ should be consulted for detailed information on Annual Status Reports (ASRs) and Action Plans.
- 2.2 The air quality objectives set out in the Air Quality (England) Regulations 2000, as amended by the Air Quality (England) (Amendment) Regulations 2002, provide the statutory basis for the air quality objectives under LAQM in England (see Annex A). Local Authorities in England are expected to report on NO₂, PM₁₀ and SO₂ as standard within their ASRs. Government does not expect local authorities to report annually on Benzene, 1,3-butadiene, Carbon Monoxide and Lead as objectives for these pollutants have been met for several years and are well below limit values (see box below).
- 2.3 In addition to the objectives set in Regulations, Local Authorities have a new, flexible role in working towards reducing emissions and concentrations of PM_{2.5}. See Chapter 7 of this guidance and Chapter 2 of LAQM.TG16⁵ for further details.
- 2.4 Section 82 of the Environment Act 1995 provides that every local authority shall review the air quality within its area, both at the present time and the likely future air quality. Section 83 requires local authorities to designate an Air Quality Management Area (AQMA) where air quality objectives are not being achieved, or are not likely to be achieved, as set out in the Air Quality (England) Regulations 2000. Once the area has been designated, Section 84 requires the local authority to develop an Action Plan detailing remedial measures to tackle the problem within the AQMA. The core statutory requirements of the Act remain as set out above. However, this policy guidance sets out changes to the review and assessment framework.

Benzene, 1,3-butadiene, lead and carbon monoxide (no requirement to report)

The objectives for pollutants: benzene, 1,3-butadiene, lead and carbon monoxide have been met for several years and are well below limit values. Government accepts that, in the absence of any particular concerns in a local area, national monitoring is currently providing a sufficient basis for the review of these four pollutants under LAQM. On this basis, local authorities are not expected to report annually on these pollutants in their ASRs. Should a local authority choose to include one or more of these pollutants in their annual report due to local reasons or circumstances, they are free to do so. Where national monitoring or modelling indicates a significant deterioration in any of these pollutants either nationally or in a particular area, Government will inform affected local authorities of any changes in expectations around reporting.

⁵ Local Air Quality Management Technical Guidance 2016 (<http://laqm.defra.gov.uk/supporting-guidance.html>)

The LAQM Review and Assessment Process

Annual Status Report

- 2.5 Local authorities are required to submit an ASR each year and for the first year of operation of the new system, completed reports should be submitted by **30 June**. The template Local Authorities are expected to follow for this report is provided in Technical Guidance (LAQM.TG16). The overall aim of this document is to report on progress in achieving reductions in concentrations of emissions relating to relevant pollutants below air quality objective levels. It is also where local authorities identify new or changing sources of emissions.
- 2.6 On completion, local authorities should submit their report to the Secretary of State (Defra) for consideration⁶, who will provide comments back in a timely manner and to which the local authorities are expected to have regard. The report should also be made available to the public, local stakeholders, the Environment Agency, Highways England and other relevant departments/stakeholders. See Chapter 6: Consultation - for further information.
- 2.7 Core requirements of the ASR⁷:
- To report progress on the implementation of measures in the local air quality action plan and other measures and their impact in reducing concentrations below air quality objectives;
 - To provide a summary of monitoring/modelling data (either locally retrieved and/or from the national network) in order to assess the air quality situation in your area and likelihood of air quality breaches, and to provide the necessary evidence base for the impact of air quality measures;
 - To report on significant new developments that might affect local air quality; and
 - To present information in a public-facing executive summary for the lay reader so that the local public can more easily engage with local air quality issues and measures taken to improve it.
- 2.8 The production of the ASR replaces the reporting procedure under the former system. It maintains the key elements of the previous approach. That is, if an authority identifies a risk that an air quality objective is or will be exceeded at a relevant location the local authority is required to move to declaring an AQMA either through a fast-track process (see para 4.6) or following additional evidence gathering. Any additional evidence gathered should be proportionate and ideally take no longer than 4 months.
- 2.9 Once an AQMA has been designated, an Action Plan should ideally be prepared within **12 months** following the date of designation. Progress on the Action Plan should be included in the annual report.

⁶ <http://laqm.defra.gov.uk/1rsw/>

⁷ Annexes may be added to the ASR for additional information if required

- 2.10 The new report allows Local Authority to focus their work on putting in place actions to improve local air quality by streamlining reporting to Government.

Appraisal Process

- 2.11 If Defra has concerns regarding the conclusions in a local authority's report, the authority will be invited to provide written comments justifying their decision within a specified deadline set out in the appraisal letter.

Local Air Quality Strategies

- 2.12 It is recommended that all local authorities, particularly those that have not had to designate AQMAs or do not expect to designate an AQMA in the future, but who have areas at risk of exceedance, should consider drawing up an Air Quality Strategy.
- 2.13 As PM_{2.5} is a pollutant for which there is no recognised safe level⁸ and for which there is significant public health concern, it would be appropriate for local authorities to set out how they are addressing this pollutant in any Air Quality Strategy including any links with the Public Health Outcome Framework (Chapter 7). The ASR provides the opportunity for the authority to report on the development of its strategy, or where the strategy is in place, to report on its progress.

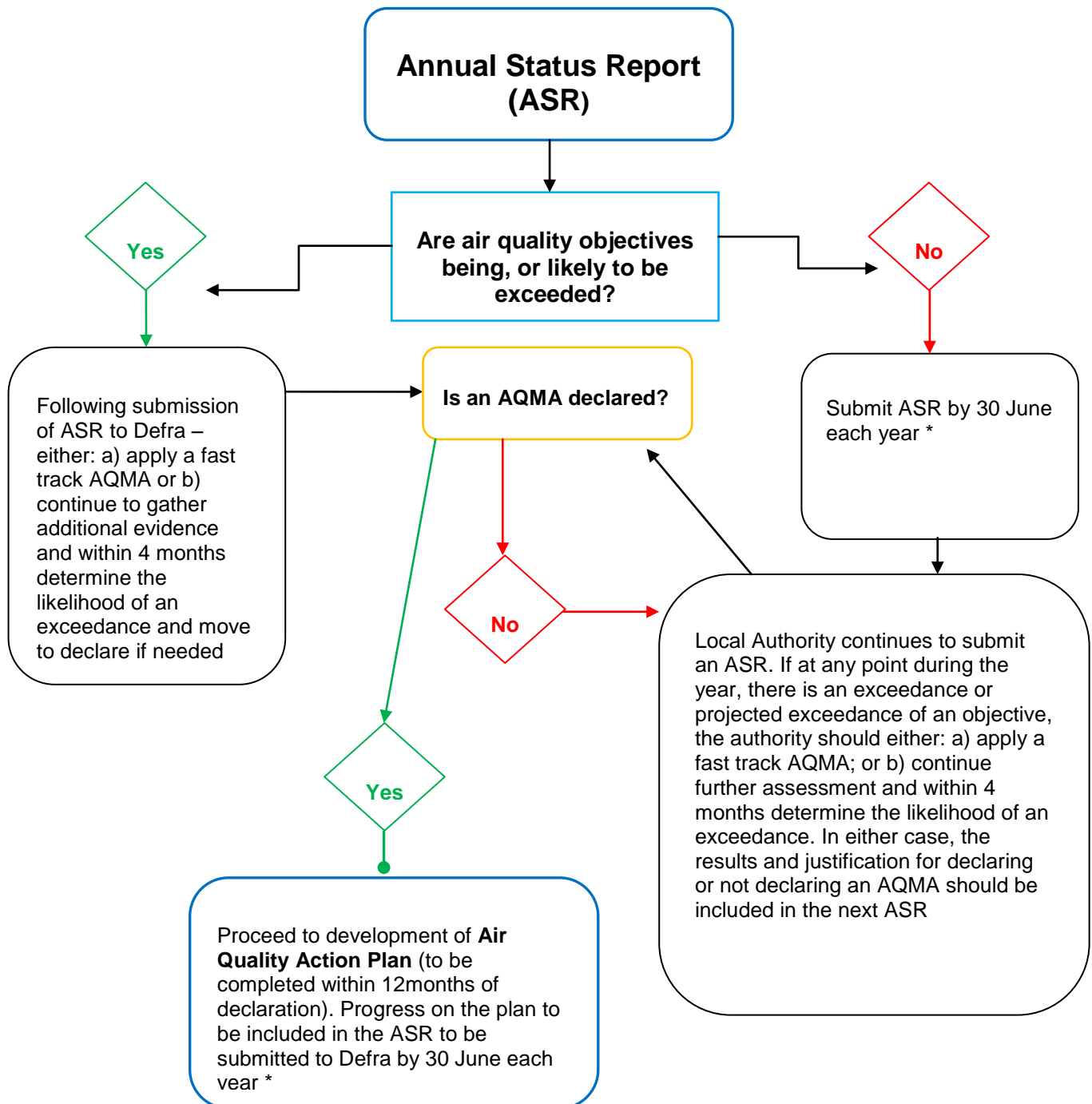
Steering Group

- 2.14 As soon as an air quality issue has been identified it is recommended that a steering group is formed to include all the main parties involved in developing either Action Plans or Air Quality Strategies. It is recommended that the Chair is of sufficient seniority to ensure that the outputs from the group are being taken forward. Where significant action is required from a county council to resolve the air quality issues, it would be beneficial to have a senior county council representative as co-chair. Membership of the group could include the Environment Agency, Highways England and local businesses and interest groups. Once the strategies and Plans have been published, the steering group can be retained to monitor progress and troubleshoot if necessary should difficulties in implementation arise. More information on the role of the steering group is provided in LAQM.TG16.
- 2.15 The public health impacts of poor air quality are well documented. We would expect the highest level of support from local authorities (e.g. Chief Executive and Council level) to ensure that all parts of a local authority are working effectively together. The public can be given further confidence that the work being taken forward to tackle air quality is supported at the highest level through engagement in and sign-off of Action

⁸https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/304641/COMEAP_mortality_effects_of_long_term_exposure.pdf

Plans and annual reports by both the Chief Executive and also the heads of the main departments involved e.g. environmental health, planning, transport and public health.

Figure 1 – The Review and Assessment (Reporting) Process⁹



⁹ The single Annual Status Report (ASR) replaces the previous 3-yearly cycle of reporting, removing the need to compile Updating and Screening Assessments (USAs), Detailed Assessments, Further Assessments, Progress Reports and Action Plan Progress Reports. [Action Plans remain as separate]

*We will review the effectiveness of the revised submission date after the first year of the new reporting system.

Chapter 3: LAQM - Roles and Responsibilities

- 3.1 Part IV (Sections 80 to 91) and Schedule 11 of the Environment Act sets out the legal obligations on local authorities in relation to LAQM¹⁰. This chapter sets out the main responsibilities of local government with particular respect to two-tier authorities. For two-tier and unitary authorities, it is expected that all departments across the authority/ies should work together to identify suitable measures to address air quality. This includes measures in relation to local transport, highways, land use planning, environmental health and public health.

Two-Tier Authorities¹¹

- 3.2 More than 200 local areas are governed by two-tier authorities e.g. a district council and a county council, each of which have powers and functions that are important in tackling air quality. There are obligations on both district and county councils within Part IV of the Environment Act. In summary, although district councils prepare the annual reports and Action Plans under LAQM, the Secretary of State expects lower and upper tier councils to work together to develop their content and, with respect to Action Plans, ensure that all necessary measures to address air pollution in their local area are included.

District Authorities

- 3.3 Under section 82 of Part IV of the Environment Act district councils should carry out periodic review and assessment of air quality within their area. The results of this review and assessment should be set out in the ASR.
- 3.4 Under section 83 the district council is required to designate an AQMA when as a result of the review and assessment that it has carried out, it appears that any of the air quality objectives are not being achieved. The district council may amend or revoke an area as appropriate in the light of subsequent reviews.
- 3.5 Under section 84, as amended by the Deregulation Act 2015 - Part 4 of Schedule 13, once an AQMA has been designated the district council should prepare an Action Plan that sets out how it will achieve the air quality standards or objectives for the area that it covers. The district council should provide information on the timescales for the achievement of measures that it can take under the powers that it has. Relevant powers and mechanisms include environmental health functions including those concerning the Clean Air Act (e.g. the ability to declare smoke

¹⁰ <http://www.legislation.gov.uk/ukpga/1995/25/part/IV>

¹¹ For the purposes of this document when discussing two tier authorities we refer to district or county councils: where we discuss district councils this covers any council that is classified as a lower tier council; and where we discuss county councils, this covers any council that is classified as an upper tier council. Unitary authorities also include metropolitan districts.

control areas) and land use planning. The Action Plan should be in place within 12 months of the district council identifying the need for one.

- 3.6 Engagement with the county council should take place at the start of the process. In reviewing and assessing air quality in a local authority area or preparing an Action Plan, the district council should take into account any recommendations made to it by the county council. It may not agree with these recommendations (see para 3.14).
- 3.7 The district council should consult on its Action Plan (Chapter 5), and is expected to make a copy of the Plan and ASR freely available for public inspection – e.g. on their website.

County Councils

- 3.8 County councils have a number of obligations under LAQM as set out below and in practice they have to proactively engage with the district council as soon as an air quality issue is identified.
- 3.9 Where a district council is preparing an Action Plan, county councils are obliged under section 86(3) to submit measures related to their functions (i.e. local transport, highways and public health) to help meet air quality objectives in their local area. These measures will be for inclusion in the Action Plan being developed (or Plans that undergo revisions) and should include the timetable for implementation of measures to be adopted. Under section 3.1 of the Air Quality (England) Regulations 2000, submission of these proposals should take place within at the latest nine months of first being consulted on the Action Plan by the district council. Earlier responses from County Councils are encouraged in order not to delay the completion of the Action Planning process.
- 3.10 There is now very strong evidence on the significant contribution of transport emissions to air pollution in urban areas¹² and the Government expects county councils to bring forward measures in relation to addressing the transport impacts in its area for inclusion in any Action Plan.
- 3.11 The county council is a consultee to ASRs and Action Plans. Under section 86(2) the county council may make recommendations to the district council in relation to any review and assessment of air quality or development or amendment of Action Plans in the local authority area.
- 3.12 **As a result of the obligations set out above, the Secretary of State would expect county councils to actively engage at all stages of review, assessment and action planning in relation to LAQM in its area. Early engagement will not only ensure a more effective Action Plan but should ensure that no unnecessary costs or resources are spent on collecting and sharing the necessary information or securing agreements too late in the process.** The role of a steering group (Chapter 2) will be important in securing support across both tiers

¹² Air Pollution in the UK publication series, Defra: <http://uk-air.defra.gov.uk/library/annualreport/index> ; Trends in NO_x and NO₂ emissions and ambient measurements in the UK, Kings College London, University of Leeds, AEA, 2011

of local government, and other bodies with an interest. It is expected that county councils will actively participate in such a group, including attendance of individuals from the key departments, such as transport.

Sharing of Data

- 3.13 Under Schedule 11 of the Environment Act, where a local authority (district or county) makes a reasonable request of information from another local authority to enable it to carry out any of its functions relating to LAQM, it is the duty of the council to provide that information. The council that provides that information is also entitled to recover the reasonable costs of doing so. However, we would hope that in the spirit of cooperation and working together to improve air quality in a local area, that unless such a request is particularly onerous to meet, councils would not feel the need to charge each other for the production of information beneficial to their local area.

Disagreements between District and County Councils

- 3.14 Under section 84(5) where there is disagreement between the county council and the district council in relation to the content of an Action Plan, either the district or county council can refer the issue to the Secretary of State for Environment, Food and Rural Affairs. The Secretary of State may choose to accept or reject the disputed Action Plan (with or without modifications) and it may not be finalised until a decision from the Secretary of State has been made.
- 3.15 When seeking the Secretary of State's assistance in resolving an issue, we would expect county and district councils to demonstrate that they have taken all reasonable steps to resolve such a dispute, prior to a referral to the Secretary of State being made.

Unitary Authorities

- 3.16 For unitary authorities roles and responsibilities are more straightforward. In effect all duties are placed on the authority and it is for it to determine which department is responsible for the production of the reports and Action Plans. In developing the Action Plan it should bring forward measures to address air quality covering the functions for which it has powers or responsibilities.

Chapter 4: Air Quality Management Areas

- 4.1 Local authorities have a duty under Section 83(1) of the 1995 Act to designate those areas where the air quality objectives are not being met, or are likely to be shown to be at risk of not meeting them, and where people are likely to be regularly present, as AQMAs.

Declaring AQMAs – Setting Boundaries and Tackling Uncertainty

- 4.2 It is important that the local authority be confident it has identified all locations and pollutants for which the air quality objectives are or will be exceeded. This requires the authority to have a broad confidence in the monitoring data and/or modelling predictions undertaken. This applies equally to the option to fast-track AQMAs (see below). Authorities should demonstrate that they are aware of the uncertainties in monitoring data and the data inputs used for modelling, and to show in their annual report what steps they have taken to minimise these uncertainties. Further information is provided in Technical Guidance.
- 4.3 When determining the boundary of an AQMA the authority should make an appropriate judgement based on the extent of predicted areas of exceedance, the locations of relevant receptors, the nature and location of relevant sources, and other local factors. These Areas can cover single streets or road networks, a junction, roundabout or even a single dwelling. In many urban and built-up areas, especially where trans-boundary pollution is an issue, the authority may decide to designate the entire borough as an AQMA; this kind of declaration provides greater flexibility for air quality officers to respond to pollution issues as and when they arise. This does not prevent officers from then focussing on key areas within an AQMA for taking action. Alternatively, applying smaller, individual AQMAs for specific 'hot spot' locations may provide a clearer focus for action plan measures and allow for strategic targeting based on the best use of resources. However, it is important that local authorities do not expend significant resources narrowing down the parameters of an AQMA to the detriment of identifying measures and taking action.
- 4.4 The exact wording of an AQMA Order is at the discretion of the authority, however a template example can be found in Annex B. It is recommended that the authority includes the following information:
- The date on which the Order came (or will come) into force;
 - List of the pollutants to which it relates and the relevant objective exceedance;
 - Map showing the area to be designated; and
 - A description of the area – e.g. does it include certain roads; any physical features such as street canyons or heavy traffic around a supermarket etc.
- 4.5 You should also:

- Ensure the Order is accessible to members of the public and enquirers; and
- Ensure Defra receive a copy of the Order for its records via the AQMA Administration Area¹³.

Option to Fast-Track AQMAs

- 4.6 LAQM has been in operation for fifteen years and we know from past submissions that once a pollutant is identified as exceeding the air quality objective or is at risk of being exceeded, the follow-up assessment more often than not confirms the initial, identified risk, leading to the declaration of an AQMA or appropriate remedial measures. Bearing this in mind, a new fast track to declaration has been introduced, which local authorities may or may not make use of as they deem appropriate. The Fast Track Option works on the assumption that most local authorities have a much better understanding of air quality in their areas than when they first started implementing LAQM. Where normal annual monitoring and local intelligence shows a persistent exceedance (or risk of exceedance) the local authority is encouraged to consider moving immediately to declaring and establishing (or extending) an AQMA and hence to the development of action plan measures to remediate the problem. It is suggested that only local authorities who, until now, have had few air quality problems, or have sufficient doubts, should consider the necessity of obtaining further supporting information, with the methods used briefly set out in their annual report.
- 4.7 It is important to note that by additional supporting information we are not advocating production of a Detailed Assessment as per the previous system, nor do we expect such additional material to take 12 months or more to gather. We would expect Local Authorities to gather evidence sufficient to enable a judgement to be made following guidance and quality assurance processes set out in Technical Guidance. A summary of this additional evidence gathered should be included in the next annual report but Local Authorities should not delay declaration of an AQMA until the report's publication but move to declare an AQMA as soon as it is satisfied.
- 4.8 Ideally Local Authorities should complete the declaration process within 4 months, or less, following the recognition of the need to declare, and submit a copy of the AQMA Order to Defra. Local authorities that have yet to submit an Order should do so via the AQMA Administration Area¹³ together with a copy of its associated map.

Revoking or Amending an AQMA

- 4.9 There is no fast-track option to revoke or make significant reductions to an AQMA. Authorities wishing to revoke or reduce an AQMA can do so following review. For revocation this should demonstrate that air quality objectives are being met and will continue to do so. In other words they should have confidence that the

¹³ <http://aqma.defra.gov.uk/1aqma/>

improvements will be sustained. Further information is provided in the Technical Guidance, but typically this is after three years or more compliance.

- 4.10 Where an Order is revised, a copy of the revocation or amendment Order should be submitted to Defra and other statutory consultees and made publicly available to ensure the public and local businesses are aware of the situation. It is expected that the local authority will take the relevant action imposed by the Order **within four months** following receipt of comments from Defra.
- 4.11 Following a revocation, ideally the local authority should put in place a local air quality strategy (para 2.12) to ensure air quality remains a high profile issue and to ensure it is able to respond quickly should there be any deterioration in conditions.

Chapter 5: Air Quality Action Plans

- 5.1 An Action Plan template is available in LAQM.TG16. It is recommended that local authorities use this template as a basis for all new Action Plans and where significant revisions are required to existing Action Plans. The template is designed to reduce the administrative burden on local authorities, whilst improving consistency in reporting and allowing for the inclusion of additional sections. The Action Plan should take a practical approach towards focussing on what really matters – identifying the nature of the problem whilst **detailing measures that are or will be actively implemented to improve air quality and quantifying their impact over time.**
- 5.2 Action Plans should include the following:
- Quantification of the source contributions (e.g. HGVs, buses, taxis etc.) responsible for the exceedance of the relevant objective. Knowing the source of the problem will allow the Action Plan measures to be effectively targeted;
 - Quantification of the impacts of the proposed measures – including, where feasible, data on emissions and concentrations (either locally obtained and/or via national monitoring/modelling statistics). It is important that the local authority shows how it intends to monitor and evaluate the effectiveness of the plan;
 - Clear timescales, including milestones and expected outcomes which the authority and other delivery partners propose to implement the measures within the Action Plan; and
 - How the local authority, including transport, planning and health departments, and other external delivery partners, will take ownership of the problem and in what capacity they will work together to implement the Action Plan.
- 5.3 **Local Authorities should aim to produce their Action Plan within 12 months of an AQMA being declared.**

Ownership and Accountability

- 5.4 Of paramount importance in ensuring the Action Plan fulfils its goal in producing quantifiable outcomes to timescale is the need for **all delivery partners** who have an influence on air quality - including external bodies such as Highways England and the Environment Agency - to take responsibility for their actions and to engage constructively in the process. This is especially important as certain measures may have knock-on effects for other policy areas.
- 5.5 All impacts and their quantification should be included in an Impact Assessment, covering any wider economic, social and environmental implications. Government has provided guidance for carrying out impact assessments, including specific

advice in relation to Air Quality valuation¹⁴. In addition, you may be required to carry out a Strategic Environmental Assessment (SEA) where proposals have a significant impact on, e.g. development. Further information on when an SEA is required and how to carry out an assessment is available at:

<http://planningguidance.planningportal.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/>

- 5.6 The Environment Act requires that Action Plans be periodically reviewed – while no time limit is set **ideally we would expect this to occur no later than every five years and more frequently if significant changes to sources occur within your local area**. If a steering group is in place, this can provide a useful review function.
- 5.7 For further information on preparing Action Plans please refer to Chapter Two of LAQM.TG16.

¹⁴ https://consult.defra.gov.uk/airquality/draft-aq-plans/supporting_documents/Draft%20plans%20to%20improve%20air%20quality%20in%20the%20UK%20%20Overview%20document%20September%202015%20final%20version%20folder.pdf

Chapter 6: Consultation

6.1 The 1995 Act provides the statutory basis for consultation and liaison in respect of LAQM. Defra (for England authorities, outside of London) is the key statutory consultee under LAQM. Schedule 11 of the 1995 Act also requires local authorities to consult the following:

- Environment Agency;
- Highways England;
- The Mayor of London (for London Boroughs only);
- All local authorities neighbouring the local authority in question;
- The County Council (if a District Council);
- Any National Park authority as appropriate;
- Other public authorities as appropriate; and
- Bodies representing local business interests and other organisations as appropriate.

6.2 Much of the reporting process under the Environment Act has now been superseded by changes implemented via the Deregulation Act 2015 (e.g. removal of Further Assessments) and the LAQM review. As such, local authorities in England are required to consult on the following:

- Annual Status Report (ASR) - including review and assessment of air quality, progress on Action Plan measures and decisions to declare, revoke or amend (subject to the degree of amendment) AQMAs; and
- Preparation or revision of an Air Quality Action Plan.

6.3 Local Authorities are encouraged to consult widely and consider innovative approaches to engage with their local area. In determining how to consult, local authorities are likely to have regard to the Consultation Principles¹⁵ issued by the Cabinet Office.

6.4 In relation to the ASR local authorities are encouraged to consult, but are expected to use their own judgement as to whether full public consultation is required. In the case of a decision to declare, revoke or significantly amend an AQMA it may be prudent to consult widely. In any case, all reports and decisions should be made easily available to the public.

¹⁵ <https://www.gov.uk/government/publications/consultation-principles-guidance>

Chapter 7: PM_{2.5} and Public Health

- 7.1 Air pollution affects mortality from cardiovascular and respiratory conditions, including lung cancer. In its report on 'The Mortality Effects of Long-Term Exposure to Particulate Air Pollution in the United Kingdom', published in 2010, the Committee on the Medical Effects of Air Pollutants¹⁶ (COMEAP) estimated the mortality burden of existing levels of air pollution on the population of the UK as being equivalent to 29,000 deaths and an associated loss to the population of 340,000 life-years¹⁷. Local authorities, working together with the public, can implement measures to reduce exposure to air pollution as well as reducing polluting emissions through – for instance – active travel plans.

Public Health Outcomes Framework (PHOF) – Healthy Lives; Healthy People

- 7.2 The Public Health Outcomes Framework (PHOF)¹⁸ is a Department of Health data tool for England, intended to focus public health action on increasing healthy life expectancy and reducing differences in life expectancy between communities. The tool uses indicators to assess improvements. Recognising the significant impact that poor air quality can have on health, the PHOF includes an indicator relating to fine particulate matter (PM_{2.5}).
- 7.3 Public health professionals and air quality specialists within local authorities should be aware of the PHOF indicator for air pollution in their area. Updates can be found at: <http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000043>
- 7.4 At its heart, the indicator for air pollution is about raising awareness of the effect of air pollution on public health. It is intended to encourage promotion of the need for local, regional and national actions to reduce air pollution and to help form a partnership between all delivery partners in pursuit of this goal. The Framework concentrates on two high-level outcomes to be achieved across the public health system, and focuses not only on how long people live, but on how well they live at all stages of life.

¹⁶

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/304641/COMEAP_mortality_effects_of_long_term_exposure.pdf

¹⁷ The loss of life attributable to population exposure to a particular factor (i.e. the years of lost life expectancy associated with attributable deaths)

¹⁸ <https://www.gov.uk/government/publications/healthy-lives-healthy-people-improving-outcomes-and-supporting-transparency>

PM_{2.5} Indicator

7.5 The PHOF includes an indicator, based on the effect of particulate matter (PM_{2.5}) on mortality.

Table 1 – PHOF Indicator

PHOF Indicator 3.1 Health Protection	
Fraction of all-cause adult mortality attributable to anthropogenic particulate air pollution (measured as fine particulate matter, PM _{2.5}) ¹⁹ .	The estimates of mortality burden are based on modelled annual average concentrations of fine particulate matter (PM _{2.5}) in each local authority area originating from human activities. Local data on the adult population and adult mortality rates is also used. Central estimates of the fraction of mortality attributable to long-term exposure to current levels of human-made particulate air pollution range from approx. 2.5% to 5% in some local authorities in rural areas, to over 8% in some London boroughs ²⁰ .

7.6 This is intended to enable Directors of Public Health to prioritise action on air quality in their local area to help reduce the health burden from air pollution. To help with this we have introduced a PM_{2.5} role for local authority air quality teams so that alongside measures to tackle other pollutants, they also consider action if necessary to address PM_{2.5} issues in their area, aligning their interests with those of public health officers.

7.7 Importantly, the Air Quality Indicator should not be seen in isolation from the other framework indicators. For instance, as well as reducing emissions, encouragement of active travel will have wider public health benefits captured in other indicators such as increased physical activity (indicator 2.13) and reducing excess weight at various ages (indicators 2.6 & 2.12). These co-benefits should form part of your overall approach as they will maximise the benefits and viability of any proposed measures.

¹⁹ <http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000043/pat/6/ati/102/page/6/nn//par/E12000007/are/E09000002/iid/30101/age/230/sex/4>

²⁰ Source: “Estimating Local Mortality Burdens associated with Particulate Air Pollution” – Public Health England 2014
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/332854/PHE_CRCE_010.pdf

Local Authority Role in Reducing Levels of PM_{2.5}

7.8 Local Authorities are expected to work towards reducing emissions and concentrations of PM_{2.5} in their local area as practicable. In doing so they are not required to carry out any additional local review and assessment (including monitoring) but make use of national monitoring²¹. This policy guidance does not prescribe what the local authority role should be; it is for the local authority in consultation with its public health officials and others to consider how it wishes to define this role. This guidance provides some examples of how such a role could be determined by local authorities. Local Authorities will then be expected to set out in their annual reports how they have chosen to fulfil their role to work towards reducing PM_{2.5} and any actions they are taking or will take, including any linkages to the PHOF. Decisions should be based on local need and priorities.

Interpretation of PM_{2.5} Role (for Reporting Purposes)

7.9 There is no regulatory standard applied to the PM_{2.5} role (for local authorities in England) with respect to action to reduce emissions or concentrations of fine particulate air pollution, although action to tackle PM₁₀/NO_x would usually contribute to this. The EU Ambient Air Quality Directive does however set out air quality standards for PM_{2.5} including an exposure reduction obligation, a target value and a limit value²², which may act as a guide in how you choose to interpret your role.

7.10 Examples include but are not limited to:

- Identifying measures already in place that can help with reducing levels of PM_{2.5} (examples of these type of measures are included in Table 2.1 of LAQM.TG16);
- Identifying new priority measures to tackle PM_{2.5} (these should be discussed with the Director of Public Health and other relevant partners in the steering group);
- Seeking to move towards a specific objective in line with the annual average EU limit value for PM_{2.5}: 25 µg/m³ to be met by 2020 (most authorities already meet this target hence the authority may wish to set a lower target concentration to benefit public health); and
- Seeking to move towards applying a specific objective in line with the EU target value of 15% reduction at background urban locations between 2010 and 2020 (authorities may choose a different % reduction if evidence shows it to be more practical and cost-effective).

7.11 It is assumed that many local authorities will consider how to address PM_{2.5} alongside other pollutants when tackling their own vehicle fleets and services and/or work with communities and businesses to achieve improvements in air quality and

²¹ http://uk-air.defra.gov.uk/data/data_selector

²² <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:152:0001:0044:EN:PDF>

that few standalone PM_{2.5} measures will be chosen unless in order to address a very specific local problem.

- 7.12 Public Health England have compiled a report entitled 'Estimating Local Mortality Burdens Associated with Particulate Air Pollution'²³ which is designed to help local authority air quality practitioners and public health professionals understand the mortality burden of fine particulate pollution within their area, which can then be used to raise awareness of the problem and how best to remediate it. Further information on how to determine and address the PM_{2.5} mortality burden in your area is also contained in Technical Guidance.

Local Authority Measures to Reduce PM_{2.5}

- 7.13 Measures to tackle PM_{2.5} can be broadly separated along mobile and stationary sources such as on-road diesel engine retrofitting and other emission control requirements. These are measures that LAs may already be taking to address pollutants such as PM₁₀ and NO_x. Further examples are available in LAQM.TG16 (Table 2.1).

Roles and Responsibilities under PHOF

- 7.14 Local authorities in England should work closely with local Directors of Public Health and 'Health and Wellbeing' boards. Working in partnership will increase support for measures to improve air quality, with co-benefits for all. Examples of joined-up working include:

Directors of Public Health

- To ensure the Joint Strategic Needs Assessment has up to date information on air quality impacts on the population; and
- To work closely with local authority health and air quality officers – e.g. have regular update meetings on key, emerging issues and sign off on ASRs and Action Plans.

²³ <https://www.gov.uk/government/publications/estimating-local-mortality-burdens-associated-with-particulate-air-pollution>

Local Authorities (Including Transport and Planning Departments)

- To ensure that Directors of Public Health are fully briefed on the scale of the problem in your local authority area – e.g. what is being done; what is needed;
- To encourage employment of a public health consultant or policy officer that has air quality responsibilities outlined in their job profile; and
- To ensure Transport and Planning departments are fully briefed on their public health duties and the risks associated with transport and planning policy (the air quality team could produce a briefing pack for these teams).

Chapter 8: Transport

Introduction

- 8.1 Road transport, in particular diesel vehicles for NO₂, is the major source of roadside air pollution in the UK, as with other European countries. As such, transport should play a significant role in solving these problems and improving air quality and public health. It is estimated that road transport contributes 20-30% of national emissions, and 80% of roadside NO₂ concentrations, where the UK is exceeding limits, are due to road transport.
- 8.2 The challenge will vary from location to location, ranging from a city-wide problem to specific hot spots in narrow and congested streets in small market towns. Local Authorities therefore need to develop a set of actions that are appropriate to your local context. The transport-related examples below will help you develop a framework for action.

Transport Planning

- 8.3 Local transport authorities in England (outside London) are required to produce Local Transport Plans (LTPs) under the Local Transport Act 2008. LTPs should include strategies and implementation plans related to all relevant environmental issues.
- 8.4 Cooperation between transport, environmental services, public health, and planning departments, as well as with partner organisations, will help ensure a strategic approach to improve air quality and quality of life, especially for those living near busy roads and junctions. Aligning Action Plans with LTPs is also good practice, and will need partnership working in two-tier and metropolitan areas (as described in Chapter 3).

Local Authority Measures

- 8.5 A number of practical measures are available to local authorities to reduce levels of pollutants from vehicles, either directly or indirectly. These can basically be divided into three categories:
 - a) **Reducing traffic levels** - e.g. through controls on the most polluting vehicles; behaviour change programmes to encourage travel alternatives and improved loading/occupancy of vehicles;
 - b) **Improving traffic flows** - e.g. through traffic management including junction design; and
 - c) **Cleaner vehicle technology** - e.g. promoting or requiring the use of low emission vehicles.

Access Control to Encourage Cleaner Vehicles

- 8.6 The most polluting vehicles can be discouraged through a number of interventions. The concept of Clean Air Zones was introduced in the Air quality plan for nitrogen dioxide (NO₂) in the UK²⁴. The Clean Air Zone framework aims to provide a consistent approach to access controls.
- 8.7 Clean Air Zones are areas where only the cleanest vehicles are encouraged to operate to improve air quality. They are geographically defined areas allowing action and resources to be targeted to deliver the greatest health benefits. Local authorities can adopt Clean Air Zones as a way to focus their actions to improve air quality. There are different classes of Clean Air Zone. Each successive class includes more vehicle types to bring about a larger reduction in emissions. Vehicle owners will be required to pay a charge if they enter a zone and their vehicle does not meet the required emission standard. Local authorities may also wish to implement a Clean Air Zone operating on a voluntary basis (i.e. without charging). Such a Zone would raise public awareness and act as a focus for targeting additional action to improve air quality. Further detail is available in section 3.5 of the UK overview document of the Air quality plan for nitrogen dioxide (NO₂) in the UK²⁵.

Promoting Travel Alternatives – Behaviour Change

- 8.8 Up-to-date and accessible information about current and forecast air quality levels is available so that individuals can take action both to reduce exposure to poor air quality and help to reduce our own emissions. Reduced exposure is particularly important for vulnerable groups such as those with circulatory or respiratory conditions. Improved understanding will support longer term behaviour change and larger scale action. Behaviour change can support a switch to more sustainable forms of transport including cycling and walking.
- 8.9 Examples of encouraging behaviour change include:
- Travel awareness campaigns – including branding as a ‘call for action’, information on walking, cycling and public transport and incentives to encourage change;
 - Workplace travel plans – working directly with business to understand staff commuting and business travel patterns and provide support to encourage greater use of more sustainable modes;
 - School travel plans – working with teachers and pupils directly through a range of activities to support behaviour change for the children and their parents; and

²⁴ <https://www.gov.uk/government/collections/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2015>

²⁵ <https://www.gov.uk/government/collections/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2015>

- Personalised travel marketing – one-to-one engagement with residence providing customers information to help them understand their travel choices for a wider of the travel activities.

Smarter Choices

- 8.10 Smarter Choices are “packages” of measures tailored to each local area, comprising both “soft” measures such as marketing and information to encourage people to use sustainable transport modes, and “hard” measures such as improvements to infrastructure and services.
- 8.11 Local authorities can also collaborate in partnerships with other organisations to encourage and support change. This can be working with an organisation to encourage changes to business travel or with bus and freight operators through ‘quality partnerships’ to support cleaner more efficient transport operations.
- 8.12 Evaluation of ‘smarter choices’ behaviour change programmes undertaken in Sustainable Travel Towns has shown a shift towards more sustainable modes of transport²⁶, with evidence to support:
- A reduction in the number of car driver trips;
 - The overall reduction in traffic;
 - Increased use of public transport; and
 - Increased active travel – cycling and walking.
- 8.13 The health and air quality benefits of such ‘smarter choices’ programmes can be promoted alongside the transport and congestion benefits. A particular example is the ‘Active Travel’ concept which encourages people to incorporate physical activity into their daily lives, and is emphasised in the Department of Health’s Public Health White Paper²⁷. The public health benefits of increasing cycling are considerable – evaluation of DfT’s Cycling Demonstration Towns initiative show these to outweigh the costs of the programme by three times²⁸.
- 8.14 School travel can be a particularly good target for these campaigns as it affects teachers, pupils and their parents. Such sustainable, active travel for journeys to school, when replacing vehicle trips, can reduce local congestion and carbon emissions.

²⁶ [Sloman, L. et. al. 2010, ‘The Effects of Smarter Choice Programmes in the Sustainable Travel Towns: Summary Report’ - A report to the Department for Transport](#)

²⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216096/dh_127424.pdf

²⁸ [Sloman, L. 2009, ‘Analysis and synthesis of evidence on the effects of investment in six Cycling Demonstration Towns’, Report for Department for Transport and Cycling England](#)

Traffic Schemes

- 8.15 To ensure that the air quality and environmental effects of all planned interventions on the road network are thoroughly understood before they are implemented, local air quality and transport teams should work in partnership with Highways England²⁹, which is a government-owned company with responsibility for managing motorways and major A roads in England.
- 8.16 The Highways England Delivery Plan³⁰ explains the importance of building up a clear picture of where pollution exists and the impact of mitigation measures. Highways England recognises the importance of working with local authorities and other stakeholders to deliver interventions on its network. It will share any new approaches to reduce and mitigate pollution so that local authorities can consider them in the development of any local actions they may wish to pursue.
- 8.17 The Government has also set up the Highways Maintenance Efficiency Programme³¹ to help local authorities plan and manage their road networks and to incorporate such plans in their LTPs and Action Plan.

Speed Limits

- 8.18 Speed restrictions of 20mph and lower may be effective in reducing exhaust emissions, encouraging positive changes in driver behavior (e.g. fewer acceleration/deceleration events), as well as reducing particulate matter due to tyre and brake wear and road dirt (including through reducing re-suspension of particulate matter in the air). Co-benefits are also reported for reducing crashes, noise reduction, promoting cycling and walking and increasing community cohesion.
- 8.19 Studies³² show that 20 mph speed restrictions³² are beneficial in reducing PM₁₀ for both diesel and petrol engines; and beneficial in reducing NO_x and CO₂ for diesel. Whilst for petrol cars there is a small increase in NO_x emissions for petrol, overall there is a positive effect from 20mph speed restrictions on air quality³³. Reduced speed and smoother driving also means less fuel consumption (fuel savings are often used as an incentive for freight and bus companies to adopt smarter driving techniques).

²⁹ <https://www.gov.uk/government/organisations/highways-england>

³⁰ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/424467/DSP2036-184_Highways_England_Delivery_Plan_FINAL_low_res_280415.pdf

³¹ <http://www.highwaysefficiency.org.uk/>

³² <https://www.cityoflondon.gov.uk/business/environmental-health/environmental-protection/air-quality/Documents/speed-restriction-air-quality-report-2013-for-web.pdf>

³³ Source: Imperial College London study on behalf of City of London Corporation - Transport and Environmental Analysis Group, 2013

- 8.20 When applying speed restrictions it is important to avoid an increase in so-called 'stop-start' traffic, as this will inevitably lead to a worsening of emissions.

Intelligent Traffic Management

- 8.21 Benefits are to be had from the ability to adapt traffic signal controls, including more efficient use of road capacity, shorter journey times, reducing the number and frequency of congestion periods, and lowering of pollution and CO₂ emissions.
- 8.22 SCOOT (Split Cycle Offset Optimisation Technique) is a popular tool for managing and controlling traffic signals in urban areas. It is an adaptive system that responds automatically to fluctuations in traffic flow through the use of on-street detectors embedded in the road.
- 8.23 SCOOT reduces vehicle emissions by reducing delays and congestion within the network. In addition it can be set to adjust the optimisation of the signal timings to minimise emissions and also provide estimates of harmful emissions within the controlled area.
- 8.24 By detecting queues that are in danger of blocking upstream junctions and causing congestion to spread through the network the SCOOT traffic manager is able to prioritise where such problems should be minimised and SCOOT then automatically adjusts timings to manage the congestion.
- 8.25 Further information on SCOOT and Traffic Signal Management is available at: <https://tfl.gov.uk/cdn/static/cms/documents/traffic-modelling-guidelines.pdf>

Cleaner Vehicle Technology

- 8.26 The long-term goal is to deliver sustainable, permanent improvements to the level of road transport emissions through such schemes as hybridisation and electrification of vehicles that produce little to no pollution at point of use.

Promoting Low Emission Transport

- 8.27 Ultra Low Emission Vehicles (ULEVs), which can include electric vehicles, hydrogen fuel cell vehicles and plug-in hybrids (when driven in electric mode) produce no tailpipe pollution and are the long-term answer to road transport air quality problems. The Office for Low Emission Vehicles (OLEV) works across government to support the early market for ULEVs, providing funding for businesses, consumers and local authorities.
- 8.28 The Cleaner Road Transport Vehicles Regulations (2011) implement the Clean Vehicles Directive and apply to contracts for the purchase of road transport vehicles (including cars and light commercial vehicles, buses, and commercial vehicles such as trucks or refuse trucks). All public contracting authorities are required to take into account energy and environmental impacts by:

- Setting technical specifications for energy and environmental performance in the documentation for the procurement of road transport vehicles;
- Including energy and environmental impacts in the purchasing decision by using energy and environmental impacts as award criteria as part of a procurement procedure; and
- Including energy and environmental impacts in the purchasing decision by monetising them in accordance with set methodology provided within the Directive (this is based on whole life costs and a tool is available)³⁴.

8.29 The Government operates a number of schemes through which local authorities can support the uptake of low carbon and ultra-low emission vehicles, such as the Green Bus Technology Fund³⁵ (for investment in low carbon buses), a low carbon batteries initiative³⁶ and OLEV.

³⁴ <http://ec.europa.eu/transport/themes/urban/vehicles/directive/>

³⁵ <https://www.gov.uk/government/publications/clean-bus-technology-fund-2015-proforma-for-local-authorities>

³⁶ <https://www.gov.uk/government/news/low-carbon-vehicles-get-government-backing-at-annual-sector-show>

Table 2 – Key OLEV³⁷ Schemes for 2015-20, which Have Already been Announced

Ultra Low Emission Vehicle Programme	
Plug-in Car Grant ³⁸	Grants for ultra-low emission cars to help offset the upfront cost differential of these vehicles. Grants of up to £5,000 will continue to be paid until at least February 2016.
<i>Go Ultra Low</i> communications campaign ³⁹	A joint-funded campaign in partnership with the automotive industry to provide information on ultra-low emission vehicles and increase understanding.
<i>Go Ultra Low</i> Cities Scheme ⁴⁰	Support for 2-4 key urban areas to become national and international exemplars in driving uptake of ultra-low emission vehicles by implementing innovative policies.
Ultra-Low Emission Taxis ⁴¹	Support for local authorities and transport operators to transition their taxi fleets to new ultra low emission models and provide supporting infrastructure.
Chargepoint Infrastructure ⁴²	Funding for electric vehicle infrastructure including domestic premises, destination and rapid chargers, public sector workplaces and residential on-street charging.
Hydrogen ⁴³	Match funding of initial hydrogen refuelling network, with already committed funding for 12 stations.
Research and development ⁴⁴	Funding for ultra-low emission vehicle related technology development in the UK.
ULEV Readiness programme ⁴⁵	Funding for central government and wider public sector organisations to drive uptake in ULEVs and help inform decision-making in public sector fleets.

³⁷ <https://www.gov.uk/government/organisations/office-for-low-emission-vehicles>

³⁸ <https://www.gov.uk/plug-in-car-van-grants/overview>

³⁹ <https://www.goultralow.com/>

⁴⁰

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/386854/141211_City_Scheme_Guidance_Final.pdf

⁴¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/382190/taxis-preliminary-guidance.pdf

⁴² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/249943/public-sector-chargepoint-scheme-guidance-v2.0.pdf

⁴³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/307019/ulev-2015-2020.pdf

⁴⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/307019/ulev-2015-2020.pdf

⁴⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/347326/ulev-readiness-project.pdf

Evaluating the Benefits of Transport Measures

- 8.30 The evidence for the impact of traffic related air pollution on human health is well-founded, but it is not always easy to assess the outcomes (impacts) associated with individual transport measures, due in part to the cross-cutting nature of pollution sources and the multiple benefits that may arise from any given action. For instance, a behaviour change campaign may both avoid trips and shift the mode of transport (e.g. from car to public transport). This in turn will have an impact by reducing traffic levels and congestion, and so reduce vehicle emissions.
- 8.31 Defra has also developed abatement cost guidance for valuing the impacts of changes in air quality⁴⁶ (this was developed primarily for English local authorities carrying out their LAQM duties). As part of its guidance, summary values (known as ‘damage costs’) have been developed for use in appraisal processes where the impacts on air pollution are relatively small (defined as impact valued at less than £50 million). Damage costs provide the benefits of marginal air quality improvements in benefits (reckoned in £ per tonne of pollutant reduced). The damage costs value the health impact of a unit of air pollutant emission on mortality (both chronic and acute) and morbidity (hospital admissions).

⁴⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/197898/pb13912-airquality-abatement-cost-guide.pdf and <https://www.gov.uk/guidance/air-quality-economic-analysis>

Chapter 9: Planning and Building Regulations

National Planning Policy and Guidance

- 9.1 The planning and air quality functions of local authorities should be carried out in close cooperation. The National Planning Policy Framework sets out national planning policies and principles for England and how these are expected to be applied. It provides a Framework within which local people and their councils produce their own distinctive local and neighbourhood plans which reflect the needs and priorities of their communities.
- 9.2 The Framework includes specific policies in relation to air quality and air quality management areas but also other national policy relevant to air quality including promoting sustainable transport. The Framework is available at: <http://planningguidance.planningportal.gov.uk/blog/policy/>
- 9.3 To support the Framework, planning practice guidance on air quality has been published which provides guiding principles on how planning should take account of the impact of new development on air quality. This includes guidance on the role of Local Plans with regards to air quality, when air quality may be relevant to a planning application and how impacts on air quality can be mitigated.
- 9.4 A number of other planning guidance documents will be relevant to considering air quality including travel plans, transport assessments and statements in decision taking planning obligations and use of conditions. The planning practice guidance is available at: <http://planningguidance.planningportal.gov.uk/blog/guidance/>

Building Regulations

- 9.5 The Building Regulations typically apply to the construction, extension or conversion of a building and also the provision of some services and fittings e.g. replacement windows and installation of boilers. The Building Regulations include requirements to provide adequate ventilation.
- 9.6 Information about the requirement of the building regulations and guidance on ways to comply is available at: <https://www.gov.uk/topic/planning-development/building-regulations>

Part 2: Further Guidance

Defra Local Air Quality Management

Defra has dedicated webpages which provide advice on Local Air Quality Management, including a range of LAQM support tools.

<http://laqm.defra.gov.uk/>

Defra UK Air website

The UK-AIR (Air Information Resource) webpages provide in-depth information on air quality and air pollution in the UK. A range of information is available, including the [latest pollution levels](#), [pollution forecast information](#), [a data archive](#), and details of the various [monitoring networks](#).

<http://uk-air.defra.gov.uk/>

LAQM Support Helpdesk

A Helpdesk is operated on behalf of Defra and the Devolved Administrations:

<http://laqm.defra.gov.uk/helpdesks.html>

Tel: 0800 032 7953

Email: laqmhlpdesk@uk.bureauveritas.com

Frequently asked questions: <http://laqm.defra.gov.uk/laqm-faqs/>

Planning and Development Guidance

The Department for Communities and Local Government (DCLG) 'planning practice guidance web-based resource' provides an easy way to navigate between the National Planning Policy Framework and relevant planning practice guidance, including:

Planning and air quality: <http://planningguidance.planningportal.gov.uk/blog/guidance/air-quality/>

Travel plans, transport assessments and statements in decision-taking: <http://planningguidance.planningportal.gov.uk/blog/guidance/travel-plans-transport-assessments-and-statements-in-decision-taking/>

Planning permission - permitted development rights (including Town and Country Planning Order): <http://planningguidance.planningportal.gov.uk/blog/guidance/when-is-permission-required/what-are-permitted-development-rights/>

Town and Country Planning (General Permitted Development) (England) Order 2015:
<http://www.legislation.gov.uk/uksi/2015/596/made>

The Greater London Authority and London Councils have produced Supplementary Planning Guidance (SPG) on how to control dust and emissions from construction and demolition. It is not a requirement to comply with this guidance but local authorities and developers may find it useful in their efforts to reduce emissions from construction and demolition:

The SPG seeks to reduce emissions of dust, PM₁₀ and PM_{2.5} from construction and demolition activities in London. It also aims to manage emissions of nitrogen oxides (NO_x) from construction and demolition machinery by means of a new non-road mobile machinery ultra-low emissions zone (ULEZ):

https://www.london.gov.uk/sites/default/files/Dust%20and%20Emissions%20SPG%208%20July%202014_0.pdf

Glossary of Terms

AQMA	Air Quality Management Area
ASR	Annual Status Report
CAZ	Clean Air Zone
COMEAP	Committee on the Medical Effects of Air Pollution
DCLG	Department for Communities and Local Government
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
LAQM	Local Air Quality Management
LAQM PG16	Local Air Quality Management Policy Guidance 2016
LAQM TG16	Local Air Quality Management Technical Guidance 2016
LTP	Local Transport Plan
NO ₂	Nitrogen Dioxide
NO _x	Oxides of Nitrogen
OLEV	Office of Low Emission Vehicles
PHOF	Public Health Outcomes Framework
PM ₁₀	Particulate Matter – 10 micrometres in diameter
PM _{2.5}	Particulate Matter – 2.5 micrometres in diameter
SCOOT	Split Cycle Offset Optimisation Technique
SEA	Strategic Environmental Assessment
SO ₂	Sulphur Dioxide
SPG	Supplementary Planning Guidance
ULEV	Ultra Low Emission Vehicles
ULEZ	Ultra-low emission zone

Annex A: Air Quality Objectives Contained in the Air Quality (England) Regulations 2000 (2002 as Amended)

Pollutant	Objective	Averaging Period
Nitrogen Dioxide - NO ₂	200 µg/m ³ not to be exceeded more than 18 times/year	1-hour mean
	40 µg/m ³	Annual mean
Particles - PM ₁₀	50 µg/m ³ not to be exceeded more than 35 times/ year	24-hour mean
	40 µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	266 µg/m ³ not to be exceeded more than 35 times/year	15 minute mean
	350 µg/m ³ not to be exceeded more than 24 times/year	1 hour mean
	125 µg/m ³ not to be exceeded more than 3 times/year	24 hour mean
Benzene ⁴⁷	16.25 µg/m ³	Running annual mean
	5.00 µg/m ³	Annual mean
1,3-butadiene	2.25 µg/m ³	Running annual mean
Carbon Monoxide	10.00 mg/m ³	Maximum daily running 8-hour mean
Lead	0.5 µg/m ³	Annual mean
	0.25 µg/m ³	Annual mean

⁴⁷ As stated in Chapter 2, local authorities in England are not required to report on Benzene, 1,3- butadiene, Carbon Monoxide and Lead. However, they remain in statute should local circumstances change and require the local authority to address the issue.

Annex B: Example Air Quality Management Area Order

Environment Act 1995 Part IV Section 83(1) [Name of Council]

AQMA Order

[Name of Council], in exercise of the powers conferred upon it by Section 83(1) of the Environment Act 1995, hereby makes the following Order.

This Order may be cited/referred to as the [name of Council] Air Quality Management Area [No1, 2, 3 if more than one is being designated] and shall come into effect on [date].

The area shown on the attached map in red is to be designated as an air quality management area (the designated area). The designated area incorporates [the whole borough of said Council] or [name of street/trunk road] or [stretch of road between junction X and junction Y]. The map may be viewed at the Council Offices.

This Area is designated in relation to a likely breach of the [nitrogen dioxide (annual mean)] objective as specified in the Air Quality Regulations 2000.

This Order shall remain in force until it is varied or revoked by a subsequent order.

The Common Seal of [Name of Council] was hereto affixed on [date] and signed in the presence of /on behalf of said Council.

.....