Consultation on review of Local Air Quality Management in Scotland

June 2013



Responding to this consultation paper

We are inviting written responses to this consultation paper by 6 September 2013. Please send your response with the completed Respondent Information Form to:

andrew.taylor2@scotland.gsi.gov.uk

or

Andrew G Taylor Air Quality Policy Manager Directorate for Environment & Forestry Environmental Quality Division Area 1-H(N) Victoria Quay Edinburgh EH6 6QQ

If you have any queries or require further information about the consultation please contact Andrew Taylor on 0131 244 7813 or at the above email address.

We would be grateful if you could clearly indicate in your response which questions or parts of the consultation paper you are responding to as this will aid our analysis of the responses received.

This consultation, and all other Scottish Government consultation exercises, can be viewed online on the consultation web pages of our website at http://www.scotland.gov.uk/consultations

The Scottish Government has an email alert system for consultations, <u>http://register.scotland.gov.uk</u> This system provides a weekly email containing details of all new consultations (including web links). It complements the Scottish Government distribution lists, and is designed to allow individuals and organisations to keep up to date with all Scottish Government consultation activity, and therefore be alerted at the earliest opportunity to those of most interest.

Handling your response

We need to know how you wish your response to be handled and, in particular, whether you are happy for your response to be made public. Please complete and return the Respondent Information Form, which can be found at the end of this consultation paper, as this will ensure that we treat your response appropriately. If you ask for your response not to be published we will regard it as confidential, and we will treat it accordingly.

All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information (Scotland) Act 2002 and therefore has to consider any request made to it under the Act for information relating to responses made to this consultation exercise.

Next steps in the process

Where respondents have given permission for their response to be made public and after we have checked that it contains no potentially defamatory material, responses will be made available to the public in the Scottish Government Library at Saughton House, K Spur, Saughton House, Broomhouse Drive, Edinburgh, EH11 3XD, (telephone 0131 244 4565) and on the Scottish Government consultation web pages within six weeks of the consultation closing date. You can make arrangements to view responses by contacting the Library on 0131 244 4552. Responses can be copied and sent to you, but a charge may be made for this service.

What happens next ?

Following the closing date, all responses will be analysed and considered along with all other available evidence to help us reach a decision on any changes to the Local Air Quality Management system that may be required and how these should be implemented. We aim to issue a report on this consultation process within four weeks of the closing date and introduce any necessary legislation as soon as possible.

Comments and complaints

If you have any comments about how this consultation exercise has been conducted, please use the contact details on page 2.

Purpose of consultation

The purpose of this consultation paper is to invite discussion on the best way to address shortcomings identified in Local Air Quality Management (LAQM) delivery. Although air quality is a devolved matter, LAQM is currently operated to a large extent on a joint basis by the four UK administrations, as many of the issues and challenges are similar across the UK. This consultation focuses on LAQM in Scotland, with the other administrations conducting their own exercises.

Specific questions on which the Scottish Government is seeking views can be found in boxes throughout this paper and are summarised on the Respondent Information Form at the end. To aid our analysis it would be helpful if responses could be structured around these questions. However we welcome contributions on any aspect of the LAQM system and consultees are free to provide additional comments and evidence which they feel are not covered by this format.

Background

Air quality has improved significantly over recent decades. However in the last few years reductions in concentrations of some major pollutants, most notably nitrogen dioxide (NO₂) and particulate matter, have started to tail off, with exceedences of both domestic air quality objectives and EU limit values continuing in many urban areas. New Air Quality Management Areas (AQMAs) are still being declared for these pollutants and air quality action plans appear generally to be having little impact, despite many local authorities having had plans in place for several years now.

Local authorities play a key role in efforts to improve air quality but recent experience suggests that LAQM, the system devised to facilitate this work, is not delivering to the extent that it should be, particularly in relation to action planning. In addition to this, work undertaken in 2011 to produce a submission to the European Commission seeking a time extension for achieving the NO₂ limit value has highlighted differences in how air quality is assessed nationally and locally, leading to uncertainty amongst local authorities as to their role in contributing towards the achievement of EU air quality limit values and an underplaying of their part in UK level reporting to the EU.

Separately, a review of LAQM completed in 2010¹ concluded that its ability to diagnose air quality problems was effective but the capacity to deliver improvements was less so. Particular areas for improvement identified were a need for better information about what measures or actions worked in what circumstances and clearer direction on responsibilities and roles of those involved in managing air quality. Reporting arrangements were also described as burdensome and overly prescriptive, compounded by the complex regulatory landscape involving both the LAQM system and the requirements of the EU Directive.

Summary of proposals

This consultation considers a number of possible changes to improve and refocus LAQM, including:

- consolidation of legislation;
- streamlining the review and assessment reporting system;
- revising and strengthening the action planning process; and
- considering the role of local authorities in meeting PM_{2.5} obligations.

Key issues

LAQM and EU reporting

One consequence of the different requirements of LAQM and EU legislation is that local authorities do not always feel a shared ownership of air quality problems identified through assessment for EU reporting. In particular, there is a widely held view that the measures taken at local level are not sufficiently taken into account during this process. Central government therefore needs to do more to explain the links between local and national data gathering, and to explore how outputs from the LAQM regime can be utilised more effectively in EU reporting. Both systems are key to our efforts to improve air quality and we need to ensure that we are drawing maximum benefit from the information available to us. A demanding air quality regime operates at EU level and it is necessary for all who can contribute to the achievement of the requirements to recognise and understand their particular roles.

¹ <u>http://www.defra.gov.uk/environment/quality/air/air-quality/laqm/</u>

A number of pollutants covered by the EU Directive 2008/50/EC on ambient air quality and 4th Daughter Directive 2004/107/EC need to be considered as part of the LAQM review. For example, there is a requirement in the 2008 directive that "Member States shall take all necessary measures, not entailing disproportionate costs, to reduce exposure to $PM_{2.5}$ ". Evidence for the adverse effects of $PM_{2.5}$ on human health is now well established and it is important to consider how local authorities can work towards meeting these new challenges. Therefore as part of this review we are considering in what capacity authorities can help central government achieve its $PM_{2.5}$ targets, taking into account local circumstances.

Public health

Poor air quality can have significant impacts on health and wellbeing in areas of high pollution, and improvements can make a vital contribution to public health goals, such as improving life expectancy. Air quality policy across the UK is based on health priorities, but there is a feeling that this message is not being communicated as effectively as it might be. Thus, as part of this review, the Scottish Government wishes to develop a more clearly defined role for air quality management in addressing public health issues, at both national and local levels.

Streamlining requirements

There are objectives for some pollutants under LAQM which are not mirrored by EU limit values, such as tighter objectives for PM₁₀ and PM_{2.5}, an annual objective for 1,3 butadiene and a 15 minute objective for SO₂. Conversely there are target values at EU level for ozone, which local authorities are not currently required to work towards. We need to consider what responsibilities local authorities have or should have in regard to such obligations, for instance whether we completely align local objectives with EU limit values or adopt a smaller, more focused set of targets under LAQM. There is also the potential to streamline legislation through merging of regulations covering LAQM and EU requirements, and to consider changes to the review and assessment reporting system.

The Scottish Government's view is that consolidating regulations would convey little improvement to LAQM, although we welcome views on this issue (which is considered in more detail in section 2 of this paper). Simplifying LAQM reporting arrangements, on the other hand, could help to free up time and resources which would be better focused on action planning. This aspect is covered in section 3.

Review of EU air quality legislation

The European Commission is undertaking a review of EU air quality legislation, which is due for completion later in 2013, with publication of a package of measures including an update to the 2005 Thematic Strategy on air pollution, a proposal to ratify the revised UNECE Gothenburg Protocol and a proposal to amend the National Emissions Ceilings Directive, setting tighter ceilings to be met by 2025 and or 2030. This could potentially result in tighter limits on some pollutants, for instance, PM_{2.5} and other new challenges to reduce air pollution further in the future. Some of these changes may have implications for LAQM. In the meantime, this does not prevent us from moving forward with considering changes to air quality delivery at the local level, although developments as the Commission's review progresses will need to be borne in mind.

Q1 a) Do you agree that these are the key issues which any changes to LAQM should take account of?b) Are there any other key issues which the Scottish Government should consider as part of the review?

1. Current situation

Local Air Quality Management

Part IV of the Environment Act 1995² provides the framework for Local Air Quality Management (LAQM) in the UK, and local authorities' duties under this Act. The Air Quality (Scotland) Regulations 2000³ and Air Quality (Scotland) Amendment Regulations 2002⁴ prescribe air quality objectives and the dates for achieving them. For each objective, local authorities have to consider present and future air quality and assess whether the objectives are likely to be achieved by these dates and in subsequent years. The procedures for doing this are set out in the 1995 Act and in policy⁵ and technical⁶ guidance issued by the Scottish Government.

Where a local authority concludes that any objective is unlikely to be achieved by the require date, an Air Quality Management Area (AQMA) must be declared by means of an order under section 83(1) of the 1995 Act. Within an AQMA, section 84(1) of the Act requires local authorities to carry out a further assessment of air quality within 12 months of the designation order. Section 84(2) requires that an air quality action plan is produced, setting out the measures that the authority will introduce in pursuit of the air quality objectives. There is no prescribed timescale for the submission of the action plan but the Scottish Government expects plans to be submitted between 12-18 months following the designation order.

Local authorities are not legally required to meet the air quality objectives but must do all that is reasonably possible in pursuit of them and report on progress annually. The Scottish Environment Protection Agency (SEPA), acting with the approval of the Scottish Ministers, has reserve powers under section 85 of the Act to require local authorities to take action where they are failing to make sufficient progress. These powers have never been used and are generally regarded as a last resort.

² <u>http://www.legislation.gov.uk/ukpga/1995/25/contents</u>

³ <u>http://www.legislation.gov.uk/ssi/2000/97/contents/made</u>

⁴ <u>http://www.legislation.gov.uk/ssi/2002/297/contents/made</u>

⁵ <u>http://www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Pollution-1/16215/PG09</u>

⁶ <u>http://www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Pollution-1/16215/TG09</u>

Table 1: LAQM objectives and EU limit/target values⁷

Pollutant	Air Quality Objective	Date to be achieved	Date to be achieved (EU target values ⁸)	Date to be achieved (EU limit values ⁹)
Benzene	16.25 μg/m ³ running annual mean	31 December 2003	This is not an EU target value	This is not an EU limit value
	3.25 µg/m ³ running annual mean	31 December 2010		1 January 2010
1,3 – Butadiene	2.25 µg/m ³ running annual mean	31 December 2003	This is not an EU target value	This is not an EU limit value
Carbon Monoxide	10.0 µg/m ^{3 -} running 8- hour mean	31 December 2003		1 January 2005
Lead	0.5 µg/m² annual mean	31 December 2004		1 January 2005
	0.25 μg/m ³ annual mean	31 December 2008	This is not an EU target value	This is not an EU limit value
Nitrogen Dioxide (NO ₂)	200 µg/m ³ (not to be exceeded more than 18 times a year – 1 hour	31 December 2005		1 January 2010
	mean			
	40 µg/m³ annual mean	31 December 2005		1 January 2010

⁷ Air quality is a devolved matter so each UK administration has its own regulations transposing EU requirements. However UK wide EU provisions are the responsibility of the UK Government and are covered in each set of regulations. ⁸ Target values differ from limit values in that they are to be attained where possible by taking all necessary measures not entailing disproportionate costs.

⁹ Limit values are legally binding EU parameters which must not be exceeded.

Particles (PM ₁₀)	50 μg/m ³ not to be exceeded more than 35 times a year – 24 hour mean	31 December 2004		1 January 2005
	50 μg/m ³ not to be exceeded more than 7 times a year – 24 hour mean	31 December 2010		This is not an EU limit value
	40 μg/m ³ annual mean	31 December 2004		1 January 2005
	18 μg/m ³ annual mean	31 December 2010		This is not an EU limit value
Sulphur Dioxide (SO ₂)	350 μg/m ³ not to be exceeded more than 24 times a year – 1 hour mean	31 December 2004		1 January 2005
	125 μg/m ³ not to be exceeded more than 3 times a year – 24 hour mean	31 December 2004		1 January 2005
	266 µg/m ³ not to be exceeded more than 35 times a year – 15 minute mean	31 December 2005	This is not an EU target value	This is not an EU limit value
Polycyclic Aromatic Hydrocarbons (PAHs)	0.25 ng/m3 – annual average	Not currently a requirement under LAQM	31 December 2012 (target of 1ng/m3	

Ozone (O ₃)	100 μg/m3 not to be exceeded more than 10 times per year – 8 hour mean	Not currently a requirement under LAQM	31 December 22012 (target of 120 µg/m3 not to be exceeded more than 25 times a year – averaged over 3 years	
PM 2.5	12 µg/m3 – annual mean	Provisional objective not currently in regulations	This is not an EU target value	This is not an EU limit value
	25 µg/m3 – annual mean		2010	2015
	20 µg/m3 - annual mean (subject to review in 2013)			2020
	National Exposure Reduction Target – average concentration over 2009/10/11	Not currently a requirement under LAQM	Between 2010 and 2020	

EU Directives

Scottish and UK policy on air quality is to a large extent driven by EU legislation. Directive 2008/50/EC on ambient air quality¹⁰ sets legally binding limits for concentrations in outdoor air of major air pollutants that impact public health such as particulate matter and nitrogen dioxide. As well as having direct effects on human health and the environment, these pollutants can combine in the

¹⁰ <u>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:152:0001:01:EN:HTML</u>

atmosphere to form ozone, a harmful air pollutant and potent greenhouse gas, which can be transported great distances by weather systems.

The 2008 directive replaced nearly all the previous EU air quality legislation and was transposed in Scotland through the Air Quality Standards (Scotland) Regulations 2010¹¹. The 4th air quality daughter directive 2004/107/EC that sets targets for levels in outdoor air of certain toxic heavy metals and polycyclic aromatic hydrocarbons will be incorporated at a later date. Equivalent regulations exist in England, Wales and Northern Ireland.

Table 1 summarises the similarities and differences between LAQM and EU requirements. The key points are:

- Ambient air quality is assessed at LAQM level via screening using local monitoring and modelling, following the Scottish Government's policy and technical guidance.
- UK reporting to the EU is based on monitoring data from the Automatic Urban and Rural Network (AURN) and modelling data from the Pollution Climate Mapping model, taking into account assessment criteria set out in the directive.
- Local authorities are not legally required to achieve the LAQM objectives, whereas EU limit values are mandatory for Member States.
- In some cases, timescales for meeting objectives and limit values are different.
- LAQM currently has an annual mean objective for 1,3-butadiene, a 15 minute objective for SO₂ and tighter objectives for PM₁₀ which are not replicated in EU legislation. There are also additional objectives for benzene and lead.
- Exposure reduction for PM_{2.5} is not currently required under LAQM, whereas the 2008 directive sets provisions for Member States to achieve PM_{2.5} targets by certain dates.

¹¹ <u>http://www.legislation.gov.uk/ssi/2010/204/contents/made</u>

2. Should EU and LAQM air quality regulations be consolidated?

Currently we operate with two sets of air quality regulations, with LAQM objectives being followed by local authorities and EU limit values being the responsibility of the UK Government and the devolved administrations. There is a significant degree of overlap between the two but in some cases LAQM objectives go beyond EU requirements. There are also differences in how air quality is assessed at domestic and European levels.

The 2008 directive sets minimum standards, with Member States or devolved administrations able to adopt more ambitious national standards provided EU obligations are covered. This has been done in the UK where the LAQM compliance deadlines have for some pollutants been earlier than the EU equivalents and some pollutants have additional objectives to be achieved. For example LAQM objectives for NO₂ were to have been achieved by 2005 but the deadline for the equivalent limit values was 2010. Similarly, in LAQM we have an annual mean objective for 1,3-butadiene, a 15 minute objective for SO₂ and tighter objectives for PM₁₀ and PM_{2.5} which do not have EU equivalents. This approach has not however been reflected in the transposition of air quality directives, where UK Government and devolved administration policy is to go no further than directive provisions. These differences could be perceived as confusing for those seeking to understand how air quality management operates in the UK, although there is no indication that there is any widespread misunderstanding in Scotland of how the two regimes complement each other.

The Scottish Government is seeking views from consultees on whether merging the two sets of regulations would have any significant benefit. Aligning achievement dates could provide enhanced clarity, but we would also like to hear what additional benefits could be delivered by merging, given that there are some quite fundamental differences between the requirements of LAQM and EU legislation. It would be helpful if consultees in favour of combining the regulations could set out how they think this could be done in a way that would make them less rather than more confusing, and indeed why this would be desirable.

Q2 Do you think the regulations covering LAQM and EU legislation should be merged? Please provide reasons for or against this approach.

Is there a case for removing some pollutants from LAQM?

1,3-butadiene

1,3-butadiene derives mainly from combustion of petrol, therefore motor vehicles and machinery are the dominant sources. It is also emitted from some processes such as the production of synthetic rubber for tyres. It is recognised as a genotoxic carcinogen and therefore no absolutely safe level can be defined.

The UK is the only EU Member State to have adopted the 1,3-butadiene standard, based on proposals by the Expert Panel on Air Quality Standards (EPAQS), despite limited monitoring data being available and considerable uncertainties surrounding the evidence on the effects on human health of the very low concentrations found in ambient air. Epidemiological data derived from animals has, however, provided good evidence on the health effects of 1,3-butadiene. The objective was set at a level deemed to be of very minimal health risk to the population. No AQMA has ever been declared anywhere in the UK for this pollutant.

Sulphur dioxide 15 minute objective

 SO_2 derives mainly from combustion of fuels containing sulphur, such as coal and heavy oils, by power stations and refineries. Between 1990 and 2009 there was an 89% reduction in SO_2 , driven largely by efforts in the refining industry to reduce the sulphur content of petroleum-based fuels, shifts in power generation fuel mix and the installation of Flue Gas Desulphurisation abatement on power stations. SO_2 is a precursor to secondary particular matter and therefore contributes to the ill health effects caused by PM_{10} and $PM_{2.5}$.

EPAQS proposed the 15-minute averaging period because the effects of SO_2 on the lung's airways may occur very rapidly, therefore as short an averaging period as practical is desirable. An impact assessment in 2007 concluded that there might be additional health costs of between £11 and £41m if this objective were not applied. There are uncertainties associated with this objective due to limited data availability and the fact that it is based on effects on vulnerable groups rather than on the population in general. There is currently one AQMA for this objective in Scotland, and 11 in the rest of the UK.

Carbon monoxide and lead

The EU limit values for both lead and carbon monoxide are similar to the LAQM objectives for these pollutants. Improvements in fuel standards and engine technology have led to significant reductions in both these pollutants so that their levels in ambient air are now very low. No Scottish local authority has ever declared an AQMA for either of these pollutants. Therefore a case could be made for removing these objectives from the LAQM regime.

Consideration

Although SO_2 is not an issue on the same scale as particulate matter or NO_2 , it can have significant localised effects and the Scottish Government is of the view that there is no case for the removal of the 15 minute objective. For the remaining objectives covered in this section, a stronger case could be made. However, the reporting requirements for these objectives are not burdensome and removal could create the perception that the Scottish Government is weakening its approach to air quality management, even though concentrations of these pollutants are now very low.

Q3 Do you think we should retain the LAQM objectives for 1,3-butadiene, SO₂ (15 minute), carbon monoxide and lead? Please state your reasons for or against, including potential implications.

3. Streamlining the review and assessment process

All local authorities must submit an updating and screening assessment (USA) every three years, and a progress report (PR) in intervening years. Where the USA or PR highlights an exceedence or possible exceedence of any objective then the local authority must prepare a detailed assessment, declare an AQMA if the DA confirms the exceedence or the risk of exceedence, and then prepare a Further Assessment (FA) to inform the development of the action plan.

Local authority monitoring data are considered in the preparation of the annual UK assessment of compliance with the limit values, although only AURN sites are actually included in the assessment. Non-AURN sites can be considered for inclusion subject to such sites meeting criteria and standards in the 2008 directive, and to other sites potentially dropping out. A more detailed assessment is undertaken where a site might change the compliance status of a zone.

Local authority action plans are referred to in UK reports to the EU, for example the time extension application for the NO₂ limit value submitted in 2011. These arrangements could be more formalised so that the local authority contribution to meeting limit values is clearer, for example by ensuring that limit value exceedences are taken into account in the development of action plans.

Considerations

Whilst the current system of review and assessment is very good at identifying air quality problems, the action planning element of LAQM has been less effective. This review offers an opportunity to consider whether anything can be done to reduce and/or simplify the reporting requirements and thereby free up more time and resources for a greater focus on action planning work.

There are clearly a number of ways in which the current reporting system could be modified. One possible approach is to do away with all reports except a PR for all local authorities, incorporating an action plan annual report for those authorities concerned. We are at the stage where we know the locations of just about all the areas where poor air quality still needs to be addressed. USAs appear to add little to what we know, but are more time consuming to prepare than a progress report. Given the comprehensive monitoring network and body of historical data we now have, it should be possible in most cases to identify the need for an AQMA

without a DA. DAs in general have a major negative impact on action planning by using up resources and postponing action plan development while work is completed. The option for a one off piece of work where absolutely necessary e.g. a modelling exercise or emissions inventory, could be retained but as an exception rather than the rule.

Likewise, FAs are of relatively limited value and may be contributing to delays in the action planning process. There seems to be a clear consensus that the FA is the least valuable part of the reporting process, and the Scottish Government is already taking steps to remove the requirement for this by amending the Environment Act 1995 through the Regulatory Reform (Scotland) Bill, which is currently progressing through the Scottish Parliament. Local authorities will still be expected to undertake source apportionment work, which has usually been done as part of the FA, but will have greater flexibility to incorporate this into action planning.

It is also the case that local authorities generally seek approval of significant reports from elected members before progressing, and this usually adds considerably to delays. Removing the requirements for most reports would also remove this bottleneck. The Scottish Government's preferred option is to move to a system of annual progress reports with all other reporting requirements removed, but we would welcome views on this proposal and also any other suggestions for changing the reporting process.

Whilst a case can be made for reducing the frequency of reports for local authorities with fewer air quality issues i.e. from annually to less often, the resources saved are likely to be minimal and the Scottish Government considers that it would probably lose more than it gains. The burden for small rural authorities producing a basic annual report is light and there has been no pressure from Scottish authorities to reduce the reporting frequency. There is a stronger case for reducing reporting for authorities with major issues, as it can be argued that the time and resources spent on producing reports could be more usefully directed towards action planning.

Should consideration be given to different reporting requirements for different local authorities, there is the question of what criteria would be used to decide who reports what and how often. More explicit encouragement for authorities to work together on a regional basis, or possibly even a formal requirement for this, could produce more effective action and efficient resource use.

An argument could also be made for reducing local authority monitoring and relying predominantly on central government monitoring and modelling, supplemented by local work where necessary. However Scottish and UK level assessment does not always pick up local issues, as has been evident in the time extension submission process, and there does not appear to be a strong case for any reduction in local monitoring effort. This would in effect represent a move away from LAQM towards concentrating on compliance with EU requirements and would be likely to result in a weakening of efforts to improve local air quality with consequential implications for human health. The Scottish Government is of the view that any change in the balance of focus between domestic and European obligations would deliver no obvious benefit, and instead attention should centre around how to make the two systems work better together.

Consideration could also be given to removing the requirement for AQMA declaration to free up further resources for action planning. However, there appears to be little merit in this approach. The AQMA approach serves as a valuable foundation for action planning and focuses attention on the issues of concern amongst those who have a role in helping to improve air quality.

Q4 What do you think are the basic air quality information requirements for local authorities and central government to meet their obligations under LAQM and EU legislation?

Q5 Do you agree there is a case for streamlining reporting, altering frequency of the report cycle etc.? If so, how should this be done?

- Q6 Can Scottish and UK data help to reduce the level of assessment required by local authorities and would this be appropriate?
- Q7 How can work undertaken by local authorities be used more effectively to support UK Government reporting to the European Commission?

Q8 Do you agree we should retain AQMAs?

4. Revise and strengthen action planning

There is a clear need to refocus action planning away from diagnosis to delivery. Despite LAQM having been established for many years now, progress with implementing action plans has been disappointingly slow. The main barriers to successful implementation are common to most local authorities and include:

- lack of political will and public support for radical measures;
- lack of funding for large infrastructure projects;
- difficulties in engaging all local authority departments in the action planning process; and
- a general lack of resources for air quality work.

Although a wide range of action plan measures have been implemented by many authorities, the majority of these have tended to be measures that are relatively inexpensive, politically acceptable and easy to implement, which often means that their impact on air quality can be low. This isn't to say that such measures do not make an important contribution, as success is judged on the overall impact of an action plan.

However, another issue associated with action planning is the lack of robust quantification of measures that have been implemented, making it difficult to assess how effective different measures have been in reducing emissions. It may be the case that the action planning process could be made more effective by switching to a focus on emissions reduction outcomes, whilst retaining a concentrations i.e. objectives based for the review and assessment side of LAQM. The Scottish Government would welcome consultees' views on this and how such an approach could be successfully implemented.

There is no firm evidence that action plan measures have directly resulted in the revocation of any AQMAs to date, not just in Scotland but anywhere else in the UK, but there is some evidence that the action planning process has played a significant role in contributing to the information base to support or influence local measures that have delivered improvements to local air quality, and that substantial improvements have been achieved.

Action planning guidance

There are many tools and pieces of guidance available to assist in action planning. However there are some indications that it is difficult for local authorities to assess exactly what information exists due to the wide range of authors, sources and formats. It may be that a centralised repository of all available tools and guidance would allow these resources to be utilised more effectively. In 2011 the UK administrations published a review of the current guidance that was available on action planning. This review highlighted that:

- there are some shortcomings in current central government guidance relating mainly to the availability and accessibility of information to support action plan development;
- guidance and tools currently available are located within a range of different documents or websites of government departments and other organisations, and this makes them difficult to find and utilise;
- a detailed and regularly updated library that includes all of the guidance and information, which is easy to find online, would be of use to local authorities;
- local authorities would like to see more real life examples of the implementation of air quality improvement measures that explain how the measures were selected, also information as to how successful they have been in terms of reducing emissions or improving ambient air quality; and
- central government should consider developing measures based action planning tools that would assist local authorities in identifying measures that are appropriate to their specific situation, based on the nature of the emission source and what level of concentration reduction is required to meet the objectives.

- Q9 Do you agree there needs to be more focus on action planning and delivery? Do you have any suggestions on how to improve delivery? What have been the main barriers to effective delivery to date?
- Q10 Do you agree that local authorities should be provided with more detailed advice and guidance on what action they can take to make their action plans more effective?
- Q11 Do you agree that relevant information from local authority action plans should be included in central government reports to the EU?
- Q12 Do you agree that a more emissions based focus on action planning would help to improve outcomes?

5. The role of local authorities in meeting PM_{2.5} obligations

The 2008 directive on ambient air quality requires Member States to take all necessary measures, not entailing disproportionate costs, to reduce exposure to PM_{2.5}. As part of this review of LAQM, we are considering in what capacity local authorities can help the Scottish Government achieve its PM_{2.5} targets, taking into account local circumstances.

To date, $PM_{2.5}$ reductions have been achieved indirectly through existing legislation that has focused on action to tackle PM_{10} concentrations. The 1st Air Quality Daughter Directive (1999/30/EC) introduced daily and annual limits for PM_{10} that have since driven efforts to curb emissions, particularly from road transport in urban areas. These limits were consolidated in the 2008 directive, which also set new targets and limits for $PM_{2.5}$ concentrations to 2020 (see table 1).

Considerations

It is important to establish what contribution local authorities can make to evaluating and assessing source apportionment, and to identifying measures that could be included in action plans. If there is a strong view that the most effective controls on PM_{2.5} are at national or international level then further consideration be will needed as to what role local authorities can play.

Given the legal obligations on EU Member States with respect to exposure reduction for PM_{2.5}, it may be that a different approach is needed from the other pollutants covered by LAQM. In addition to local considerations, should authorities also be asked to make a contribution to the national exposure reduction targets and, if so, what form should this contribution take? Is the standard hot spot focused approach appropriate in this context and would there be benefits in additional background monitoring? Given the different monitoring site location criteria for LAQM and EU reporting, how can the data gathered from local authority sites be formally used in exposure reduction assessment? Would it be more appropriate to focus on emissions reductions rather than concentrations?

Q13 What role do you see for local authorities in meeting PM_{2.5} obligations?

Q14 Are there specific measures that authorities could take to reduce PM_{2.5} that differ from those already being undertaken for PM₁₀?

6. Air quality and public health

Poor air quality can have a significant impact on public health and wellbeing and it is important that this is taken into account by local authorities when undertaking their LAQM duties. Air quality policy across the UK is based on health priorities and there are major opportunities for local air quality improvements to contribute to wider public health goals, such as increasing life expectancy. Authorities can play a key role to play in contributing to these improvements.

Good communications not only help to inform the population about local health risks from air pollution but also to encourage awareness of and discussion about measures to improve air quality. Several local authorities in Scotland have developed effective communications campaigns in relation to their LAQM activities, notably in the context of vehicle emissions testing and idling targeting. At the beginning of 2012, the Scottish Government introduced the Know and Respond alert service, which provides a text or voice message to registered users whenever air pollution levels are moderate or higher, based on the banding system used by the UK administrations. These initiatives, and others like them, can be built upon to further enhance and strengthen the message, and the Scottish Government would like to hear from consultees any ideas and suggestions as to how this might be done.

Q15 What approaches and strategies are currently being used to communicate the health impacts of poor air quality? How can these be built upon and improved to strengthen the message?

Q16 What role should the Scottish Government be playing in promoting the links between air pollution and public health?

Review of Local Air Quality Management in Scotland



RESPONDENT INFORMATION FORM

Please Note this form **must** be returned with your response to ensure that we handle your response appropriately

1. Name/Organisation Organisation Name

Orga	anisation Name						
	e Mr 🗌 Ms 🗌 I name	Mrs 🗌 Miss 🛛] [Dr 🗌	Please ti	ck as	appropriate
Surr	name						
Fore	ename						
2. P	ostal Address						
Po	stcode	Phone			Email		
3. P	ermissions - I an	n responding a	as				
Individual / Group/Organisation							
		Please tick	as a	ppropr	iate		
(a)	a) Do you agree to your response being made available to the public (in Scottish Government library and/or on the Scottish Government web site)?			(c)	The name and address of your organisation will be made available to the public (in the Scottish Government library and/or on the Scottish Government web site).		
	Please tick as appropriate						
(b)	Where confidentiality is not requested, we will make your responses available to the public on the following basis				Are you co response available?		· · · · · · · · · · · · · · · · · · ·
	Please tick ONE of the following boxes				Please tic	k as a] No	ppropriate

	Yes, make my response, name and address all available	or				
	Yes, make my response available, but not my name and address					
	Yes, make my response and name available, but not my address	or				
(d)	We will share your respon policy teams who may be wish to contact you again so. Are you content for So to this consultation exercise Please tick as appropria	addre in the ottish se?	ssin futu	ng the issues yo are, but we requ	u discuss iire your p	. They may permission to do

CONSULTATION QUESTIONS

Q1 a) Do you agree that these are the key issues which any changes to LAQM should take account of?b) Are there any other key issues which the Scottish Government should consider as part of the review?

Comments

Q2 Do you think the regulations covering LAQM and EU legislation should be merged? Please provide reasons for or against this approach.

Comments

Q3 Do you think we should retain the LAQM objectives for 1,3-butadiene, SO₂ (15 minute), carbon monoxide and lead? Please state your reasons for or against, including potential implications.

Comments

Q4 What do you think are the basic air quality information requirements for local authorities and central government to meet their obligations under LAQM and EU legislation?

Q5 Do you agree there is a case for streamlining reporting, altering frequency of the report cycle etc.? If so, how should this be done?

Comments

Q6 Can Scottish and UK data help to reduce the level of assessment required by local authorities and would this be appropriate?

Comments

Q7 How can work undertaken by local authorities be used more effectively to support UK Government reporting to the European Commission?

Comments

Q8 Do you agree we should retain AQMAs?

Q9 Do you agree there needs to be more focus on action planning and delivery? Do you have any suggestions on how to improve delivery? What have been the main barriers to effective delivery to date?

Comments

Q10 Do you agree that local authorities should be provided with more detailed advice and guidance on what action they can take to make their action plans more effective?

Comments

Q11 Do you agree that relevant information from local authority action plans should be included in central government reports to the EU?

Comments

Q12 Do you agree that a more emissions based focus on action planning would help to improve outcomes?

Q13 What role do you see for local authorities in meeting PM_{2.5} obligations?

Comments

Q14 Are there specific measures that authorities could take to reduce PM_{2.5} that differ from those already being undertaken for PM₁₀?

Comments

Q15 What approaches and strategies are currently being used to communicate the health impacts of poor air quality? How can these be built upon and improved to strengthen the message?

Comments

Q16 What role should the Scottish Government be playing in promoting the links between air pollution and public health?



© Crown copyright 2013

You may re-use this information (excluding logos and images) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit http://www.nationalarchives.gov.uk/doc/open-government-licence/ or e-mail: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

ISBN: 978-1-78256-XXX-X (web only)

The Scottish Government St Andrew's House Edinburgh EH1 3DG

Produced for the Scottish Government by APS Group Scotland DPPASXXXXX (06/13)

Published by the Scottish Government, June 2013