Wither LAQM?

Barnes, J.H., Hayes, E.T., Chatterton, T.J. & Longhurst, J.W.S.
Air Quality Management Resource Centre, University of the West of England, Bristol, UK

IAQM
Where now for LAQM?
12th November 2013
Who are AQMRC?

- Air Quality Management Resource Centre, UWE, Bristol
- Established in 1997
- Working at the interface of academia and practice, policy and science in AQM
- >200 peer-reviewed paper and book chapters and edited books
- 16 PhDs on AQM issues
- Advised UK central government, local government, EA
- Retained as consultants to Defra and DAs from Round 1 to Round 4 of LAQM
- Contributed to PG(03), TG(03), PG(09), TG(09), numerous FAQs and informal guidance contributions to NSCA/EPUK publications
- Internationally, advised EC, South Africa Dept. of Environmental Affairs, Nigerian Space Research and Development Agency
- Advised megacities: Bangkok, Beijing, Sao Paulo, Mexico City, Delhi
- Instrumental in the foundation of IAQM
Overview

• Heath impacts of air pollution
• LAQM Review 2013
• Defra consultation on LAQM review
• UWE response to consultation
Health impacts of air pollution

• Poor ambient air quality is projected to be the world’s leading environmental cause of mortality by 2050, ahead of dirty water and lack of sanitation (OECD, 2012).

• Health effects include: respiratory illness, asthma, allergic illnesses, diabetes, heart disease, cancer, adverse pregnancy and birth outcomes and lowering of male fertility (WHO, 2013).

• Air pollution now classed in the same category as tobacco smoke and UV radiation – Group 1: carcinogenic to humans (IARC, 2013).

• Costs to UK society from poor air quality are on a par with those from smoking and obesity, reducing life expectancy on average by 6 months at an estimated cost of around £16 billion per annum (House of Commons Environmental Audit Committee Report, 2011).
National air quality strategy

• In 1997 the UK Government published the first of three Air Quality Strategies presenting the national approach and setting out the Local Air Quality Management (LAQM) process to manage air pollution.

• Principle of subsidiarity: “Action should be taken to improve air quality at the most appropriate level, be it international, European, national or local”.

• LAQM role was to be in supplementing and “fine tuning” central policies at local hotspots where national measures would be too blunt or expensive.
Number of Local Authorities with AQMAs

- Rate of AQMA declarations slowing but few revocations
Defra commissioned a review of the effectiveness of Local Authority Air Quality Action Planning and future policy options for LAQM (published June 2013); concluded that:

- **Scale of air quality exceedences** much greater than anticipated
- Despite implementation of local air quality action plans by many local authorities, **lack of quantification of measures** made it difficult to assess their effectiveness in improving air quality
- **No evidence of AQMA revocations** on the basis of AQAP measures
- **Failure of Euro standard vehicles** to achieve expected emission reductions has undermined effectiveness of some measures
- Review and Assessment could be simplified, but risk in reducing reporting requirements is that **some local authorities may cease monitoring**
Defra LAQM consultation (England only)

- 8-week consultation formally (but quietly!) published 12th July 2013
- Sets out four aims and four options to meet them
- >300 responses
- First stage of a two-stage consultation process; separate consultation on any changes to regulations and guidance on AQ standards expected June/July 2014
Context for 2013 LAQM Review: The Red Tape Challenge

Defra are committed to:

- **Consolidating Air Quality Standards Regulations** to simplify the regulatory landscape.
- Focusing local air quality requirements on those that are essential to ensure **compliance with EU targets**.
- Reviewing the role and responsibilities of local authorities to help ensure that **action is taken by those with relevant powers** to address the key issues (e.g. transport emissions).
- Reviewing the **role of transport measures** in meeting air quality targets, including the consistency in approach across local areas. In taking this forward **Defra will work closely with other relevant departments**, especially the Department for Transport and Department of Health.
- Reviewing the **Clean Air Act** and associated regulations to identify which measures are redundant and which can be modernised to help local authorities meet EU air quality targets and help reduce costs for businesses. The first merger of smoke control regulations will come into force in April.
Defra’s proposed aims for improving LAQM

1. Local action is focused on what is necessary to support air quality improvements to benefit public health and to work towards EU air quality standards

2. Local government and other stakeholders are clear on their roles and responsibilities and work together to improve air quality

3. Local authorities have simple reporting requirements with less bureaucracy and more time to concentrate on actions to improve air quality and public health

4. Local authorities have access to information about evidence based measures to improve air quality including on transport and communications
Defra’s proposed options

1. Business As Usual with limited changes
2. Concentration on Action Planning and focused reporting
3. Alignment with EU requirements to meet air quality limit values
4. Separate local air quality management duties do not exist
Defra’s preferred proposed option

Option 3: Alignment with EU requirements to meet air quality limit values

• All of Option 2 plus **Local authorities no longer required to carry out detailed assessments or to make/amend AQMAs.**

• Consolidate and amend Air Quality (England) and Air Quality Standards Regulations so that **local authorities work towards compliance with EU air quality limit values and targets** where there is scope for action at the local level.

• **No reporting requirements on local hotspots** outside of the national assessment of EU air quality standards but a stronger interest and reporting on local measures which help to improve air quality and bring us closer to compliance with EU air quality standards.

• Local authorities to focus on action planning and public health and report on measures taken to improve air quality and these are included in reports to EU on compliance where quantified.
Devolved Administrations’ approach

• Scottish Government consulting on:
  – 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.

• The Scottish Government's view is that consolidating regulations would convey little improvement to LAQM, but simplifying LAQM reporting arrangements could help to free up time and resources which would be better focused on action planning.

• Welsh and Northern Ireland Governments are yet to consult…
UWE summary response to Defra

• LAQM needs to be reinvigorated and its public health protection purpose restated and prioritised.
• The Air Quality Regulations need to be updated and aligned more explicitly with EU Limit Values.
• The Air Quality Strategy needs to be reviewed and updated redefining the contributions of national and local actors.
• Local Authorities need support and encouragement to implement Action Plan measures.
• Review and Assessment, the diagnosis of air quality problems or improvements, is an essential precondition for effective and targeted action to improve air quality, and its evaluation. It must therefore be retained although the current administrative arrangements could be improved.
• In support of public health improvements, Government (both national and local) needs to achieve greater internal coordination of departmental actions and to deploy these interventions more effectively.
• Local authority actions can contribute to meeting EU Limit Values, but the means by which this is reported needs careful consideration.
Consolidating the national and local regs

- Differences in the pollutants, averaging periods and timescales for achievement between the Air Quality England Regulations and the Air Quality Standards Regulations,
  - e.g. the 15-minute objective for $\text{SO}_2$, $\text{PM}_{2.5}$

- Discrepancies between the applicability of the EU limit values and national air quality objectives in terms of ‘relevant public exposure’ and monitor siting criteria
Responsibilities for AQ management

• A statutory duty to improve air quality on all local governments, regardless of tier, is necessary particularly for those departments whose policies may influence air quality – must be clear, achievable and enforceable, and must be upheld by national departments, e.g. DfT

• Research has shown disjuncture between Environmental Health and Transport departments’ attitudes to air quality management, with many Transport departments treating air quality as a tick box exercise in LTPs

• In order to ensure roles and responsibilities are explicit, a revised national air quality strategy is required
Need to retain Review and Assessment

- Presumption that local authorities’ R&A activities are the limiting factor in implementing local air quality Action Plans is flawed. More influential factors include lack of statutory requirement to achieve the air quality objectives which undermines political will to rate air quality in relation to other political pressures.

- Vital to retain a statutory requirement for local reporting on air quality in order to ensure continued local monitoring. Without local monitoring, there is no accurate measurement of local concentrations, and no continual trend data against which to assess the implementation of local measures to reduce pollution or to assess the public health impact.

- National monitoring and modelling as reported to the EC is unable to adequately capture local hotspots that local authority monitoring has identified.

- Detailed and up-to-date air quality information is also necessary when challenging new polluting developments.

- Action taken at a local level should be reported to the EU, but so should locally-measured concentrations.
Need to retain AQMAs

• AQMAs must be retained as basis for development control. AQMAs act as the trigger for identification of developments that may require an air quality assessment and provide some degree of protection against developments that may worsen air quality or introduce exposure at these locations.

• AQMA is often major signifier of institutional recognition that an air quality problem exists. At the point of declaration it often becomes much easier for cross-departmental communication, and appropriate allocation of resources to occur.

• Crucially, AQMAs represent the only spatial indicator of public health exposure.
Access to information

• Quantifiable evidence for implementation of measures should be shared to support local authorities producing Air Quality Action Plans

• Likewise, any data/tools devised for one local authority that may be applicable in others should be made more widely available

• Information is useful but funding is key!
Summary

- Understanding of health effects of air pollution is growing.
- Local exceedences of air quality objectives are widespread and not decreasing.
- LAQM Action Planning faces challenges in reducing air pollution.
- Defra propose to remove need for local reporting (monitoring) and AQMAs to focus on Action Planning.
- Widespread concerns regarding implication of proposals due to:
  - inability of national monitoring and modelling to capture local concentrations,
  - need for AQMAs to flag up air quality for transport planning and development control, and
  - an absence of national approach to improve air quality.
Thank you for your attention.

Any questions?
References


