



LAQM Helpdesk

LAQM Helpdesk Update and Action Planning

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Welsh Air Quality Forum
Forwm Ansawdd Awyr Cymru



Llywodraeth Cymru
Welsh Government



**Department
for Environment
Food & Rural Affairs**

Move Forward with Confidence



**BUREAU
VERITAS**

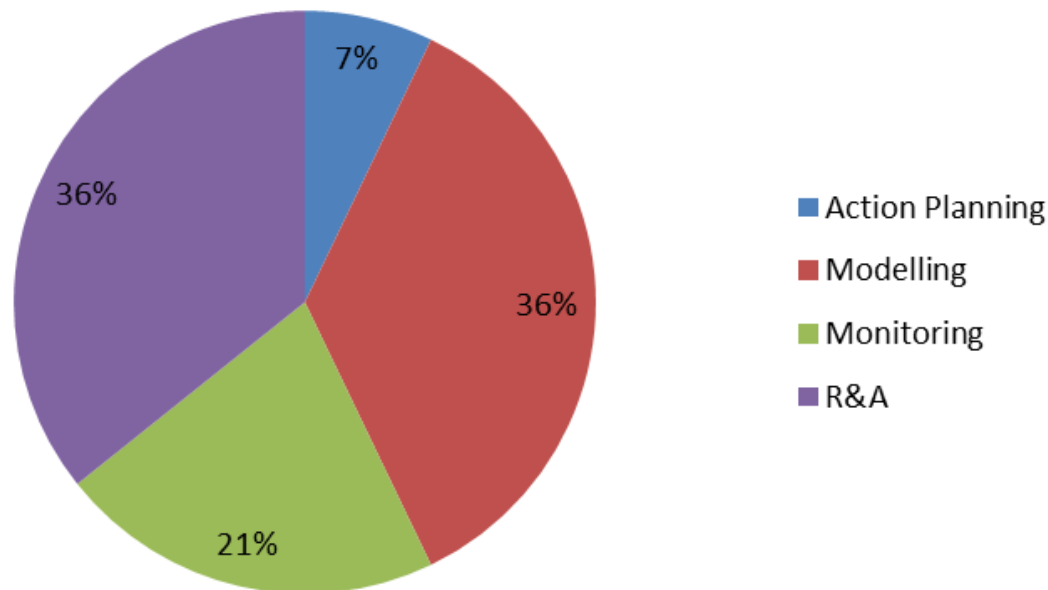
Agenda

- LAQM Helpdesk – Status Update
- LAQM Helpdesk – Trending Topics
 - STOR
 - NRMM
 - Wood burning
- Action Planning
 - Current approach
 - Lessons from recent experience
 - Developing an effective plan
 - Way forward



LAQM Helpdesk – Status Update

- Currently Round 6 of R&A (2015-2017)
- USA due end April 2015
- As of 7th October, **13** of **22** submitted
- Issues due to UK-AIR downtime (availability of BG maps and AURN data)
- Within past 12 months, only **14** Helpdesk queries received from Welsh authorities:
 - Modelling **5** queries
 - R&A **5** queries
 - Monitoring **3** queries
 - Action Planning **1** query



LAQM Helpdesk – Status Update

- 36 AQMAs currently declared in Wales:

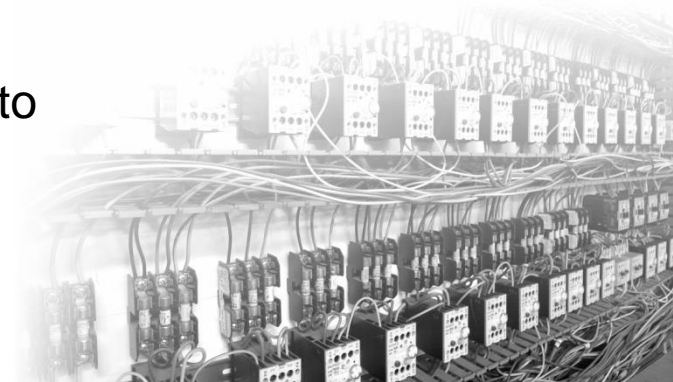
Source	Number of AQMAs
County or Unitary Authority Road	17
Road transport unspecified	13
Mixture of road types	4
Highways Agency Road	1
Industrial Source	1

- Majority declared for exceedences of the annual mean AQS objective and/or the 1-hour mean AQS objective for NO₂ due to road traffic emissions



LAQM Helpdesk – Trending Topics - STOR

- STOR (Short Term Operating Reserve) (NO_x/NO_2 , PM_{10} , SO_2)
- Use of backup generators for meeting peak electricity demand
- NG pushing for 1800 - 2300MW contracted STOR
- Several applications during TR27 in Wales, e.g. Blaenau Gwent County Borough Council (Andrew Long)
- Comprise multiple diesel fuelled engines (40 to 50 of 400-600kW_e), often with net aggregate input just below the 50 MW_{th} threshold for regulation as Part A(1) activities by the EA. Releases often low level (e.g. 3m)
- Principal concern to meeting 1-hour NO_2 AQS objective for human health
- Ecological effects also of concern (NO_x critical levels, N and acid deposition critical loads)
- Annual operating profiles and suitable consideration to significance of effects often overlooked



- Non-Road Mobile Machinery (NO_x/NO_x, PM, SO₂)
- Large construction sites of most concern
- Area of focus for London Boroughs (The control of dust and Emissions during construction and Demolition – SPG, July 2014)
- In London Boroughs, NRMM of specified net power (37kW to 560kW) must now meet strict standards (Stage IIIA/B standards set in EU Directive 97/68/EC) – potential for higher polluting NRMM to be used outside of the Capital
- Principal concern to meeting short-term AQS objectives
- Emissions and associated impacts can be difficult to quantify – often only qualitatively assessed
- Where considered potentially significant, emissions estimates can be made using equipment type, number, location, phasing plans, engine specs and fuel type
- Dispersion modelling – area sources



LAQM Helpdesk – Trending Topics – Wood burning

- Residential wood combustion (PM)
- Use currently increasing – rising fossil fuel prices
- Recent research shows PM_{2.5} emissions severely underestimated (potentially 20% higher)
- Potential issue from both individual plant emissions and cumulative from multiple sources
- Release characteristics of primary importance
- Area of future focus for AQEG



Action Planning – Current Approach

- Environment Act 1995 - AQAP to be prepared within 12 months of an AQMA being declared
- Progress on AQAP implementation and results to be reported annually
- PG09, TG09, supporting LAQM Practice Guidance, Planning Practice Guidance on Air Quality, LAQM Support website
- AQAPs should include the following a minimum:
 - **Quantification of source contributions** - knowing the source of the problem will allow the AQAP measures to be effectively targeted
 - **Quantification of impacts of proposed measures** - expected emission and concentration reductions, how to monitor and evaluate effectiveness
 - **Clear timescales** - milestones and expected outcomes
 - **Defined roles and responsibilities** - how stakeholders will take ownership and in what capacity they will work together
- Measures should be commensurate with the local air quality issue



Action Planning – Lessons from Recent Experience

- Currently 36 AQMAs in Wales - 3 have been revoked. Measure of Action Plan success? Ineffectiveness may be due to:
 - Air quality assessment is inadequate, incomplete or is not detailed enough
 - Nature and extent of the AQMA is not clearly defined;
 - Assessment not clearly defined the relative contribution of sources that are giving rise to the problem;
 - Assessment not clearly defined the extent of the level of emissions reductions that are required;
 - Measures that can deliver the required levels of emissions reductions are not clearly identified;
 - Suitable assessment of preferred options has not been carried out;
 - Process not integrated with related policies, plans and programmes at a local and regional level;
 - No dialogue established with neighbouring authorities with shared responsibilities;
 - Transport Planners not engaged in the process - AQAPs not integrated with Local Transport Plans;
 - Assessment of existing measures within transport plans is inadequate;
 - Key stakeholders have not been engaged throughout the process;
 - Lack of technical and financial resource at a local level; or
 - Lack of political engagement.



Action Planning – Developing an Effective Plan

- Some common requirements:
 1. Develop the plan in stages
 2. Undertake appropriate local monitoring and assessment (source apportionment)
 3. Decide what level of actions are required
 4. Establish links to other key policy areas / strategies
 5. Establish a Steering Group with key stakeholder groups at an early stage
 6. Measures selection and impact assessment
 7. Monitoring and evaluation of success
 8. Consultation



Action Planning – Funding Measures

- Funding preferred measures often most significant barrier to implementation and success
- Authorities must be more astute in seeking funding, e.g. s106 and CIL
- Developing SPD for Air Quality in advance may assist
- Explore all sources of funding at the earliest opportunity



Action Planning – Way Forward

- Potential for Action Plan report template?
 - Consistency of approach
 - Codification of measures - assist EC e-Reporting
- Potential for Action Plan Toolkit?
 - Awareness of available measures
 - Not an 'off the shelf' shopping list solution – user caution
- Reduce timescales for issue identification through to measure implementation?
 - Realise air quality improvements faster
- Submittal, appraisal and approval of AQAPs via the RSW?
 - Centralised process
 - Audit of progress



Any Questions?

- The LAQM Helpdesk is always there to assist!
- 0800 032 7953
- LAQMHelpdesk@uk.bureauveritas.com

