

# **Minutes of the Air Quality Forum Meeting: 22 March 2007**

## **List of attendees at Annexe A**

### **Summary of Action points from today's meeting:**

- i) UKPIA to send Defra comments on SO2 15 minute objective paper (complete) and respond to Defra request for further costs
- ii) Defra to circulate paper "Air Quality Impacts of Climate Change Mitigation: UK Policy and Passenger Vehicle Choice" (complete - circulated with minutes)
- iii) Defra to circulate paper from HPA on tunnel studies on diesel exhaust exposure (complete - circulated with minutes)
- iv) Defra to inform IPPC Sounding Board of EC forthcoming IPPC consultation (complete)
- v) DfT to report to next Forum meeting on transposition of marine element of Sulphur Content of Marine Fuels Directive.

## **1. Introductions**

1.1 Martin Williams (Chairman/Defra) welcomed Anelli Gilbert from the Non Ferrous Alliance who would represent the Metals Forum as a new member of the Air Quality Forum; introduced Professor Jon Ayres, Chairman of the Committee on Medical Effect of Air Pollutants (COMEAP), who would be giving a presentation on COMEAP's report on mortality of long term exposure to air pollution; and Helen Ainsworth the new head of the Air Quality European and International Branch (Defra).

## **2. Minutes of Forum meeting 30 November 2006 and actions arising**

2.1 The minutes of the previous meeting were agreed. On actions outstanding from the Forum's November meeting: today's meeting would include presentations on COMEAP's report and the Beacon scheme; a note by the Scottish Executive on indoor air pollution had been circulated with today's papers.

2.2 Department of Health (DH) explained that horizon scanning by COMEAP of air quality issues likely to arise within the next few years was an ongoing process which included strategy meetings with the Chairman, attendance at Annual Air Pollution research meetings, reviews of annual abstracts of research and discussions arising in COMEAP and its sub groups.

2.3 DH reported that discussions with Defra had started on the issue raised by the Institute of Air Quality Management (AQF paper 16/06) concerning the disparity between the UK objective/EU limit value for nitrogen dioxide and the air pollution banding "moderate" descriptor.

### **3. Review of the Air Quality Strategy**

3.1 The Chairman reported that part of the current IPPC Guidance to regulators, which dealt with the application of BAT for compliance with the Air Quality Strategy's national objectives and the European Directive's air quality limit values, was being revised. This would set out the legal status of objectives and limit values and make it clear that operators would not be required to go beyond BAT to achieve national objectives. A draft text had been circulated by Defra in January to the industry Sounding Board meeting of stakeholders for comment. A further version would be circulated to the Sounding Board shortly. The Chairman asked that members keep in mind the revision of the guidance during the discussions to follow on the Strategy's 15 minute objective for sulphur dioxide and objective for polycyclic aromatic hydrocarbons.

#### **Sulphur dioxide 15 minute objective**

3.2 Defra summarised paper AQF 1/07 which set out the case for retaining the Strategy's current sulphur dioxide (SO<sub>2</sub>) 15 minute objective. The objective had been agreed in 1997, retained by the UK Government and devolved administrations in their revised Strategy of 2000, and included in Local Air Quality Management regime. The vast majority of UK industry were now complying with the objective. The paper gave a conservative estimated net disbenefit of removing the objective of between £11m- £41m per year up to 2015. Other significant health disbenefits, for example, acute effects on sensitive individuals estimated to be of the order of 70,000 additional episodes of broncho-constriction per year, were not included as there were uncertainties and the effect was difficult to monetise.

3.3 David Acres, Association of Electricity Producers (AEP), said their key concerns about the objective were set out in correspondence last year on this issue and their comments submitted to the 2006 consultation on the Air Quality Strategy review. The principle remains that the benefits of a short term objective are from reductions in short term peak concentrations, but the cost-benefit analysis used only considered reductions in long term concentrations. AEP recognised there were difficulties in measuring costs and benefits of short term exposure to pollutants. AEP welcomed the outline methodology in the paper for assessing short term benefits, but which had been used so far. This methodology should be taken forward, so it could be used in future assessments. The overall level of exposure was also important to keep in mind as it was likely that few people would be affected by emissions from power generation located in rural areas. They considered the paper should also make it clear that the new WHO guidelines were not to be used as standards but were intended for use by risk managers to determine the right level of compliance when setting a standard.

3.4 The Chairman recognised that WHO guidelines and EPAQS standards did not take risk management issues into account but would look to clarify their status in the paper. Ideally the methodology would aim to calculate

what the health impacts were but the epidemiology was not available to quantify it. The intention was to provide a benchmark to demonstrate the likely effects. Health Protection Agency (HPA) added that paper clearly stated the calculations of additional episodes of broncho-constriction were done on a worse case scenario because of the uncertainties.

3.5 Jon Ayres (COMEAP) considered the methodology adopted was a logical approach but also recognised there were difficulties in measuring short term effects. Results on broncho constriction in laboratory controlled studies would not necessarily reflect what happened outside where the pollution dose could not be controlled. It was also difficult to say with certainty how many episodes actually occur in the public; some people would visit their doctor, others would self-treat. COMEAP had discussed how to refine this to try to get a better idea of the situation.

3.6 Noel Olson, British Medical Association (BMA), recognised there were difficulties in assessing the objective but considered that was not a reason for removing it. In the case of tighter standards there would always be calls for the burden of proof to be higher. But the precautionary principle and polluter pays principle still applied and the objective should be retained.

3.7 Malcolm Watson, UK Petroleum Industries (UKPIA), was concerned that long term costs and benefits were being used to justify a short term objective. They also considered the modelling overestimated the impact from the refinery sector and that industry did not recognise the refinery costs used in the paper. UKPIA considered that the objective should be removed and that this would not result in increased emissions of SO<sub>2</sub> as three refineries currently affected had compliance plans in place. UKPIA would write to Defra setting out their comments. **Action UKPIA**

3.8 The Chairman considered that compliance by the three refineries highlighted the flexibility of the permitting system and how a proportionate response to a recognised health impact was adopted under the existing legislative process, and supporting the case for retaining the SO<sub>2</sub> 15 minute objective. The Chairman asked if UKPIA were able to provide the refinery industry costs which Defra had requested earlier. UKPIA agreed to check and respond to Defra. **Action UKPIA**

3.9 Anelli Gilbert (Metals Forum) asked what specific changes were being considered to the IPPC guidance and for details of the other sectors responsible for 30% of SO<sub>2</sub> emissions.

3.10 The Chairman replied that the present IPPC guidance needed to be more explicit on the status of the EU air quality limit values and the UK Strategy's air quality objectives and how regulators should take these into account under the permitting system when applying BAT.

3.11 The SO<sub>2</sub> paper had focussed on the oil refining and power generating industries where any removal of the objective would have the largest effect. The other sectors, such as domestic coal burning, would not have the same

scale of effect and any exceedances were being addressed under existing controls through local air quality management or Clean Air Act controls.

### **Objective for polycyclic aromatic hydrocarbons**

3.12 Defra summarised paper AQF 2/07 on the Strategy's current objective for polycyclic aromatic hydrocarbons (PAHs) to help inform decisions.

3.13 The current objective was not included in regulations for local air quality management and, like the EU target value, UK industry did not have to go beyond BAT. The majority of UK already complies and only 5 sites had exceeded in recent years. It was not possible to do a similar cost benefit assessment as provided for the SO<sub>2</sub> paper, but there were no additional costs associated with retaining the objective. However, it was considered the objective was important to send a signal on the need to maintain downward pressure on emissions of carcinogenic chemicals. In particular, the promotion of biomass in urban areas, under low carbon energy initiatives, could result in higher emissions of PAH.

3.14 UKPIA noted that emission for "other sources and sinks", which included accidental fires and other difficult to control sources, were projected to remain unchanged up to 2020; they noted that residential and commercial sectors were also difficult to control. UKPIA questioned whether the current modelling was a sufficient basis for setting a standard and whether it was right to set a target for PAH which would not be met completely, whereas the EU target value would be achieved throughout the UK. AEP were also concerned that this might lead to a consensus in other Member States that the UK was 'going it alone'. However, BMA considered removing the objective was difficult to justify and doing so was likely to draw public criticism.

3.15 Defra reported that both the EU target value and the Air Quality Strategy's objective for PAH would be met in most parts of the UK but it was important to have a benchmark to manage emissions. There was no additional requirement for operators to meet the EU PAH target or Strategy's objective and no additional measures were being proposed at present.

3.16 The Chairman informed the Forum that the draft of the new Air Quality Strategy was due to be finalised in the next few weeks; this would then need cleared by Ministers in the UK Government and devolved administrations. Timing of its publication would also need to take account of local authority elections in the UK and parliamentary elections in Scotland and Wales.

## **4. Air Pollution and Health**

4.1 Professor Jon Ayres, Chairman of the Committee on Medical Effect of Air Pollutants (COMEAP) gave a presentation on COMEAP's report on mortality of long term exposure to air pollution, which was followed by a short session for question and answers. A copy of the presentation would be circulated with the minutes of the meeting.

4.2 David Lemon, Environment Industries Commission, mentioned that a recent presentation by Dr Axel Friedrich, UBA Germany, indicated that NO<sub>2</sub> was a more serious problem than particulate matter.

4.3 Professor Ayres replied there was a good deal of information about ambient NO<sub>2</sub> levels in the UK but less so on the epidemiological association with personal health, although it might represent a marker for other pollutants, eg particles. NO<sub>2</sub> was perhaps more important indoors where levels and impact was much larger.

4.4 BMA said it was important to look ahead for policy implications from the impact of emissions from the aging fleet of small diesels vehicles currently on the road. Professor Ayres replied the issue was the impact from the mass measure of particles and which metric was the most important measure of the toxicity of particles. Nanoparticles, for example, had high surface areas but little mass which was thought to be important for toxicity. A great deal of work was underway looking at what metric could be developed for measuring both ambient air and in the workplace.

4.5 The Chairman agreed to circulate copies of a paper "Air Quality Impacts of Climate Change Mitigation: UK Policy and Passenger Vehicle Choice", presented at recent conference in Canada. HPA would also provide a copy of a report on tunnel studies on vehicle exhaust exposure to circulate to the Forum. **Action Defra/HPA**

4.6 Department of Health presented paper AQF 3/07 on health effects of air pollution which provided updates on COMEAP's other activities.

## **5. European and international air quality developments**

5.1 Defra presented paper AQF 4/07 which set out details of recent developments in the EU, including negotiations on the proposed new air quality directive, review of the National Emissions Ceiling Directive (NECD), transposition of several directives and the revised Large Combustion Plant Directive.

5.2 Alice Hume (CBI) was concerned that the CAFÉ process on the review of the NECD was not as open as it should be and had only provided for limited involvement of stakeholders. The Chairman reported that the UK and other Member States had expressed similar concerns at a recent CAFÉ Steering Group meeting. CAFÉ seemed to have focussed initially on how best to take the review forward with Member States but stakeholder involvement should be expanded in forthcoming meetings of the working group.

5.3 CBI alerted the Forum to the EC's consultation on IPPC review which they understood was due to start in May for 8 week period. The Chairman would ensure the Defra IPPC Sounding Board of industry stakeholders were aware of the exercise. **Action Defra**

5.4 UKPIA enquired if any progress had been made in transposing the marine elements of the Sulphur Content of Marine Fuels Directive. Department for Transport (DfT) agreed to check and report to the Forum.

**Action DfT**

**6. Transport and air quality issues – update by DfT**

6.1 The vehicle emission standards **Euro 5** had first reading at European Parliament in December 2006. Implementation date would be 2009 for new vehicles and 2011 for all vehicles; implementation for **Euro 6** would be 2014 for new vehicles and all vehicles from 2015. Light goods vehicles would have a further year to comply and derogations under Euro 5 for passenger vehicles would end on September 2012.

6.2 DfT had launched its **eco driving communication campaign** on 11 March, targeted mainly at climate change. The literature and information ranked vehicles in terms of their CO<sub>2</sub> emissions and information on air quality was included in a “tips” section. The next stage was to add a league table of “cleanest” cars and it was planned to add more to the website on air quality.

6.3 Jim Storey, Environment Agency, enquired if the scheme would be extended. DfT said a large campaign involving national press, radio and TV adverts was planned for this summer. Ed Dearnley, National Society for Clean Air, suggested the scheme should be monitored and the public reactions assessed this time next year. DfT replied market research assessments were planned to assess the impact of the scheme.

6.4 Colin Copelin, Passenger Transport Association, considered that traffic management techniques often mitigated against eco driving. David Muir, Institute of Air Quality Management, reported that Bristol City had submitted their traffic plans to DfT which incorporated eco driving. DfT were keen to incorporate eco driving into traffic management plans.

6.5 The Mayor’s consultation on the order to introduce a **low emission zone (LEZ)** in London in 2008 had finished on 2 February. DfT were working closely with Transport for London on a number of issues, including the coverage of the trunk road network. The Mayor was expected to make an announcement on the scheme in the next few months.

6.6 Geoff Day, Freight Transport Association, was concerned that the Mayor’s current plans for the London LEZ would allow Euro I and Euro II vehicles, including some built in the early 1990s, which complied with Euro III standard but which were unlikely to meet other Euro standards for NO<sub>x</sub>, would be allowed into the zone without penalty. Operators were likely to turn to these older more polluting vehicles to avoid the penalty. The Association consider the LEZ should instead adopt a rolling age programme for vehicles concerned, of eight years to ten years or so.

6.7 Work was continuing on the **Project for the Sustainable Development of Heathrow** looking at compliance with the EU air quality

directive limit values. Modelling was looking at cause and effect and more work was need on emissions from perimeter road traffic and aviation. Public consultation was planned to take place later this year. DfT would provide a further update at the next meeting of the Forum in June.

6.8 The **Eddington transport study**, published in December 2006, focused on transport infrastructure to support the economy, but also looked at environmental impacts and the relationship to the Stern report. It gave advice on factors to consider when planning transport infrastructure schemes, such as looking at full costs of journeys and quality of life. DfT were taking this forward focusing on long term strategy, improving analysis and input into the planning system. Ministers planned to make a detailed response to the study this summer.

## 7. Local air quality management (LAQM)

7.1 Defra presented paper AQF 5/07 which provided updates on local authorities LAQM activities, including integration of action plans and local transport plans, latest statistics of air quality management areas and action plans, reviews and assessments and the 2007/08 air quality grant scheme.

7.2 A paper was circulated setting out details of the **Beacon scheme** delivering cleaner air awards. Defra reported that 4 local authorities had been awarded Beacon status at a ceremony in London on 22 March. Those authorities had proved to be very proactive in dealing with air quality policy and demonstrated their willingness to share best practice with others. Seminars would be held over the coming year to enable Beacon authorities to disseminate key their air quality messages and activities.

## 8. AOB

8.1 Sarah Legge, Greater London Authority, drew members' attention to the notice circulated with today's papers on the review of the Mayor's Air Quality Strategy scoping event at City Hall on 28 March. The event marked the start of the formal review of the 2002 Strategy and further consultation would follow later in the year. Spaces were still available.

8.2 David Muir, Institute of Air Quality Management, gave a short report on roadside emission work in 2006 by Bristol City Council using remote sensors. Drivers of 700 polluting vehicles were identified using the DVLA computer base and sent letters informing them of the check and the penalties for operating vehicles which did not comply with the minimum MOT emissions standards. Public reaction was very positive and majority of drivers appreciated that the Council had drawn their attention to the problem.

8.3 The Chairman reminded members of the dates for the Forum's next meetings, which had been circulated earlier in the year: 28 June, 27 September and 6 December.

Forum Secretariat,

Defra  
April 2007

Attendee	Representing
Martin Williams	Chairman Defra
David Lemon	Environmental Industries Association
Noel Olsen	British Medical Association
Alice Hume	CBI
Malcolm Allen	London Councils
Colin Copelin	Confederation of Passenger Transport
Sarah Legge	GLA
Anelli Gilbert	Metals Forum
Huw Morgan	Welsh Local Government Association
John Evans	Society of Manufacturers & Traders
Malcolm Watson	UK Petroleum Industries Association
Ed Dearnley	National Society for Clean Air
David Acres	Association of Electricity Producers
David Muir	Institute of Air Quality Management
Professor Jon Ayres	Chairman COMEAP
Sasha McQuire	Dept of Trade & Industry
Trevor Clarkson	Dept of Trade & Industry
Victoria Waite	Dept for Transport
Simon Goodwin	Dept for Transport
Roger Worth	Dept for Transport
Heather Walton	Health Protection Agency
Inga Mills	Health Protection Agency
Joanna Warner	Cabinet Office
Louise Newport	Department of Health
Jim Story	Environment Agency
Andrew Taylor	Scottish Executive
Carolyn Vannan	SEPA
Sarah Dudgeon	Defra
John Rea	Defra
Colin McMullen	Defra