

**Recommendations of the 12<sup>th</sup> Meeting of the National Air  
Quality Reference Laboratories (AQUILA)  
18 – 19 November 2008 @ JRC Ispra Italy**

**Recommendation 1 (November 2008):**

Following the (final) agreement of AQUILA regarding AQUILA document N37, discussing how to organise and manage NRL and WHO inter-comparisons for CO, NO, NO<sub>2</sub>, SO<sub>2</sub>, O<sub>3</sub> and benzene, it is agreed that this document be adopted and implemented comprehensively for all such comparisons in future.

**Recommendation 2 (November 2008):**

The National Reference Laboratories in many of the EU Member States do not regularly participate in the inter-comparisons carried out by the JRC and other related institutes (e.g. WHO), since up until now these NRLs did not volunteer to participate. It is strongly recommended that the relevant NRLs be encouraged to increase their regular participation (i.e. at least once every 3 years) in future in these inter-comparisons in order to demonstrate the quality of their measurements, for all of the regulated pollutants where there are JRC inter-comparisons.

**Recommendation 3 (November 2008)**

In view of recommendation 2 above, it is proposed that the JRC investigates the practical feasibility of establishing an inter-comparison involving long-term benzene samplers that use the reference method defined in Directive 2008/50/EC, and also that the JRC establishes the level of interest in this comparison from all the AQUILA NRLs.

**Recommendation 4 (November 2008)**

Following a number of presentations from different AQUILA Members, concerning the results obtained from parallel measurements of the TEOM FDMS version C and later versions with the PM reference method, it is recommended that the Steering Committee of AQUILA, together with Theo Hafkenscheid RIVM, draft a letter to the manufacturer of this instrument, Thermo Europe, indicating AQUILA's severe dissatisfaction with the results obtained up to now, and requesting that the problem be dealt with as soon as possible. This is important, particularly in view of the urgent requirement for many Member States to obtain new PM measurements of the data quality specified by the EU Directive 2008/50/EC, and determined by using the EU Guide to Equivalence or a similar procedure.

**Recommendation 5 (November 2008)**

It is recommended that Member States carry out wherever practical side-by-side comparisons between continuous PM<sub>2.5</sub> and PM<sub>10</sub> monitors and the manual reference methods in order to check and/or to continue to

demonstrate that these automated methods produce equivalent results, in a manner that is compatible with the revised EC “Guide to Equivalence” document (on-going QA/QC) and with the requirement of EU Directive 2008/50/EC (Annex VI, B1).

**Recommendation 6 (November 2008)**

The AQUILA Group recommends that the sites selected to monitor the PM<sub>2.5</sub> AEI with a non-reference method have satisfactory infrastructure to allow for regular and valid side-by-side comparisons to be carried out between the reference method and the continuous monitor. These side-by-side comparisons should be made over a suitable timescale and at a suitable frequency so that the equivalence of the data obtained at these sites can be shown to be representative.

**Recommendation 7 (November 2008)**

It is recommended that enhanced quality assurance/quality control procedures be developed and agreed to cover all the technical operations required for PM analysers, to ensure the accuracy of the monitoring that is carried out at the European AEI sites. This is necessary to ensure that the required long-term trend information obtained is valid and suitable for the determination of compliance with the exposure concentration obligation and the attainment of the exposure reduction target.

**Recommendation 8 (November 2008)**

A short paper will be developed on how to use the monitoring data provided from the Member States to EEA on continuous analysers for gaseous pollutants, with requirements on how to treat, for example, reported negative numbers, rounding of results and problems with interpreting the LV/TV also with rounding. A small AQUILA working group will draft this paper for review. For gaseous pollutants all data greater than “negative detection limit (-DL)” should be accepted. Ways to determine the DL will be proposed in the a.m. paper.