



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL  
ENVIRONMENT  
Directorate C – Air & Chemicals  
ENV.C1 – Clean Air and Transport

Brussels, 18 October 2004  
ENV.C.1. AK(2004)  
**M/360 EN**

## **STANDARDISATION MANDATE TO CEN FOR STANDARD MEASURING METHODS FOR THE DETERMINATION OF TOTAL GASEOUS MERCURY IN AMBIENT AIR AND THE TOTAL DEPOSITION OF MERCURY**

### **I. MOTIVATION**

Council Directive 96/62/EC on ambient air quality assessment and management establishes a framework for, among others :

- defining and establishing objectives for ambient air quality in the Community for 13 air polluting substances
- assessing the ambient air quality in Member States on the basis of common methods and criteria.

This “Framework Directive” defines the basic principles, which should allow to achieve these requirements. The quality objectives and the assessment methods are established by “daughter Directives”, to be drafted according to a time schedule which is fixed in the Framework Directive. A proposal for a Directive of the European Parliament and of the Council relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air has been adopted last year [COM (2003) 423], and the First Reading Agreement has been reached between the European Parliament and the Council in 2004. The adoption of the Directive is expected in autumn 2004.

Following the requirements of the upcoming Directive, Member States will have to measure the total gaseous mercury in the ambient air, as well as the total deposition of mercury.

In order to ensure the comparability of data measured by all Member States, standard measurement methods need to be established.

Reference method(s) to be used for the implementation of the Directive shall be based on the standardised methods where available.

The availability of standardised reference methods is fundamental to an efficient implementation of EC legislation on ambient air quality.

### **II. DESCRIPTION OF THE MANDATED WORK**

1. The Commission entrusts CEN with the following work:

Establishing of standard measuring methods for the determination of the total gaseous mercury in ambient air and the determination of the total deposition of mercury, following provisions stated in the upcoming Directive of the European Parliament and of the Council relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.

Validation of the methods, including the testing of different types of samplers (bulk, wet-only and Bergerhoff) in local industrial and remote sites for the deposition.

2. The standard will cover the following subjects:

- range of application (concentration levels for which the methods apply) ;
- concerning Hg deposition: description of the sampling and, to the extent necessary, the analysis methods;
- concerning Hg in ambient air: method(s) description(sampling, calibration, analysis aspects);
- overview of the performance characteristics relevant for the measurement of total gaseous mercury and the measurement of total deposition;
- test procedure to establish the performance characteristics and the overall uncertainty of the methods (laboratory and/or field tests);
- performance characteristics of the current methods ;
- recommendation for use.

3. The Commission recommends CEN to take account, as much as possible, of standards or rules currently available in this area at a national or international level, and in particular the work being done within the CEN TC/264 WG 20 and WG 21 on the deposition sampling methods for the heavy metals and the polycyclic aromatic hydrocarbons, and within CEN TC/264 WG 14 on the methods for determination of Pb/Cd/As/Ni in ambient air.

### **III. EXECUTION OF THE MANDATE**

1. CEN will present the draft standard (EN) to the Commission before 1 March 2009.
2. The European standard (EN) will be adopted before 1 May 2010. At this date, the three linguistic versions (DE, EN, FR) will be available as well as the correct titles in other Community languages.
3. Before 1 November 2011, the standard (EN) will be transposed into a national standard and all conflicting national standards of the Member States will be withdrawn.
4. CEN will present a report, at least once a year, on the progress of the work.

5. The standstill period referred to in Article 7 of Directive 98/34/EC of 22 June 1998 shall commence when the CEN accepts this standardisation mandate<sup>1</sup>.

---

<sup>1</sup> OJ L 204 of 21.07.98, p. 37, as amended by Directive 98/48/EC (OJ L 217 of 5/8/98, p. 18)