



COMMISSION OF THE EUROPEAN COMMUNITIES

DIRECTORATE GENERAL III
INDUSTRY

Directorate B: legislation and standardization; telematics networks
Unit III/B-2: standardization

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STANDARDIZATION MANDATE TO CEN FOR A MANUAL REFERENCE METHOD FOR THE CALIBRATION OF AUTOMATED MEASUREMENT SYSTEMS FOR TOTAL MERCURY EMISSIONS INTO THE AIR AND MAIN PERFORMANCE CHARACTERISTICS OF THE AUTOMATED MEASUREMENT SYSTEMS.

I. MOTIVATION.

Waste incineration plants have a particular environmental importance because of their emissions into the air, and in particular, mercury. A large quantity of mercury is found in a gaseous form in emissions and it is necessary to limit these emissions.

In conformity with article 130S of the EEC Treaty a strict emission limit value for total mercury is to be set in order to guarantee a high level of environmental protection. Moreover, a better protection for the environment and human beings will be obtained by an approach at Community level rather than by isolated measures from some Member States.

As a consequence of this approach it is necessary to have available a harmonized manual reference method allowing the calibration of automated measurements systems for total mercury emissions into the air as well as main performance characteristics for the automated measurement systems.

Monitoring in respect of a limit value for total mercury emissions requires a manual reference method allowing the calibration of automated measurement systems and to know the main performance characteristics for the automated measurement systems. Within the Community there are no manual reference method available to measure emissions of total mercury.

The Commission forwarded to the Council in March 1992, a proposal for a directive concerning the incineration of hazardous waste. The proposal provides, inter alia, for an emission limit value for mercury contained in the flue gases of the incineration plants. This limit value applies to both the mercury contained in the dust and in the gaseous or vapour form and currently requires periodic monitoring. The limit value proposed for mercury and its compounds expressed as mercury is 0,05 mg/m³. This limit value must be respected in all average values measured over the sampling period of a minimum of 30 minutes and a maximum of 8 hours.

Given the fact that the major part of the mercury is emitted in gaseous form, it is very important to have available a manual reference method allowing the calibration of automated measurement systems for total mercury emissions into the air as well as the main performance characteristics for the automated measurement systems, so as to make it possible in the future to set down in the directive a limit value for total mercury emissions measured continuously.

The above-mentioned proposal for a directive on the incineration of hazardous waste requires the use of the standard for the measurement of total mercury emitted into the air.

The availability of a standard is a fundamental condition for the efficient implementation of the Directive.

II. DESCRIPTION OF THE MANDATED WORK.

1. The Commission entrusts CEN with the following work:

Preparing a standard for a manual reference method allowing the calibration of automated measurement systems for total mercury emissions into the air in the range of 0.05 to 0.10 mg/m³ as well as for the main performance characteristics for the automated measurement systems.

The standard is to cover :

- field of application;
- basic principles of the procedure;
- equipment and accessories;
- reference material requirements;
- design and operation of the sampling equipment;
- sampling and analysis procedure;
- calibration and verification of the analytical function;
- calculation of results;
- performance characteristics;
- interferences;
- main performance characteristics for automated measurement systems.

2. 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.

III. EXECUTION OF THE MANDATE.

1. CEN will present the draft standard (prEN) to the Commission before 30 June 1996.

2. The European standard (EN) will be adopted before 1 November 1997. At this date, the three linguistic versions (DE, EN, FR) will be available as well as the correct titles in the other community languages.
3. Within six months of its adoption, the harmonised standard (EN) will be transposed into a national standard and all the different national standards of the Member States of the Community will be withdrawn.
4. With the acceptance by CEN of this order the transitional period addressed in Article 7 of Directive 83/189/EEC of 28 March 1983 (OJ L109 of 26 April 1983) will begin.
5. The Commission reserves the possibility of specifying more precisely, if necessary, the essential requirements in function of the final version of the directive, once adopted by the Council. The present order may be modified by common agreement if that proves to be necessary during the course of the work.
6. CEN will present a report, at least once a year, on the progress of the work.