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Air quality — Measurement of stationary source emissions — Requirements for measurement sections and sites and for the measurement objective, plan and report

Qualité de l'air — Mesurage des émissions de sources fixes — Exigences relatives aux sections et sites de mesurage et relatives à l'objectif, au plan et au rapport de mesurage

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by European Committee for Standardization (CEN) (as EN 15259:2007) and was adopted without modification other than those given below, under a special “fast-track procedure”, by Technical Committee ISO/TC 146, *Air quality*, Subcommittee SC 1, *Stationary source emission*, in parallel with its approval by the ISO member bodies:

— any "EN ISO xxxx" references have been changed to "ISO xxxx" references;

— “*n*” has been corrected to "n_d" in Formulae (D.6) and (D.7);

— the black spot from the center of the circle has been removed in Figure D.2.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

This document defines requirements for

a) measurement sections and sites at waste gas ducts of industrial plants and

b) measurement objective, plan and report.

This document is intended to ensure reliable and comparable results when used in conjunction with reference methods such as those that have been developed by CEN/TC 264.

This document is important to plant designers, constructors, plant operators, testing laboratories, accreditation bodies and regulators.

This document requires the specification of a measurement objective. There can be various objectives for measuring emissions, e.g.

— for assessing whether industrial installations are operating in compliance with IPPC permits[1] (emission limit value compliance assessment),

— for emissions declaration and reporting for emission inventories (e.g. local, national and international e.g. for EPER[1],[2]),

— for acceptance tests (proof of guarantee),

— in case of complaints,

— for obtaining a permit (e.g. following changes to process operations or plant design),

— after expiration of a set time interval to establish the condition of the plant,

— in case of interruption or disturbance of operations,

— within the framework of safety precaution investigations,

— for the calibration of continuously operating emission measuring systems,

— for checking the function of continuously operating emission measuring systems,

— to establish the cause of particular emission behaviour (e.g. the determination of the cause of a failure of the waste gas treatment to maintain the guaranteed/required level of cleaning),

— to give a prognosis of likely emission levels in special operating conditions, e.g. after changes of procedure, in case of disturbance or interruption, or in case of expansion of capacity,

— for establishing emission trading schemes[3],

— for determining emission factors and

— for assessing available techniques for an industry sector (e.g. at company, sector and EU level)[3].

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Air quality — Measurement of stationary source emissions — Requirements for measurement sections and sites and for the measurement objective, plan and report

1 Scope

This document specifies the following requirements:

a) requirements for measurement sections and sites with respect to performing emission measurements;

b) requirements for the measurement objective, plan and report of emission measurements of air pollutants and reference quantities to be carried out in waste gas ducts at industrial plants.

This document applies to periodic measurements using manual or automated reference methods (RM).

This document specifies generic principles which can be applied to perform emission measurements at different plant types and to meet different measurement objectives.

NOTE The measurement objective is specified by the customer. The testing institute identifies the measurement objective and related regulatory requirements at the beginning of the measurement planning. Where measurements are being made for regulatory purposes, the customer should seek approval from the competent authority.

This document specifies procedures for taking representative samples in waste gas ducts.

This document specifies a procedure for finding the best available sampling point for automated measuring systems used for continuous monitoring of emissions.

The planning and reporting aspects of this document are applicable to emission measurements at diffusive and fugitive emission sources.

This document does not address aspects of structural safety of chimneys and ducts, construction of working platforms and safety of personnel using them.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

NOTE These terms and definitions are in accordance with VIM and CEN/TS 15674.

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