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English Version

**Stationary source emissions - Guidance on the application of EN
14181:2004**

Emissions de sources fixes - Guide d'application de l'EN
14181:2004

Emissionen aus stationären Quellen - Leitlinien zur
Anwendung der EN 14181:2004

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Foreword

This document (CEN/TR 15983:2010) has been prepared by Technical Committee CEN/TC 264 "Air quality", the secretariat of which is held by DIN.

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Introduction

This CEN Technical Report provides supporting guidance on the application of EN 14181:2004. It is based on the growing experiences with EN 14181:2004 throughout the CEN member countries. EN 14181:2004 specifies three levels of quality assurance (QAL), known as QAL1, QAL2 and QAL3 as well as an Annual Surveillance Test (AST). This Technical Report explains the requirements of these levels of quality assurance to achieve a consistent application of EN 14181:2004.

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1 Scope

This CEN Technical Report provides guidance for applying the European Standard EN 14181:2004.

This CEN Technical Report provides guidance only on applying the quality assurance levels QAL1, QAL2 and QAL3 as well as the Annual Surveillance Test (AST).

This CEN Technical Report is an informative document.

2 Terms and definitions

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

2.1

air quality characteristic

one of the quantifiable properties relating to an air mass under investigation, for example, concentration of a constituent

[EN 14181:2004, 3.1]

2.2

automated measuring system

AMS

measuring system permanently installed on site for continuous monitoring of emissions

[EN 14181:2004, 3.2]

NOTE 1 An AMS is the automated application of a monitoring method, which is traceable to a reference method.

NOTE 2 Apart from the analyser, an AMS includes facilities for taking samples (e.g. sample probe, sample gas lines, flow meters, regulators, delivery pumps) and for sample conditioning (e.g. dust filter, moisture removal devices, converters, diluters). This definition also includes testing and adjusting devices that are required for regular functional checks.

2.3

calibration function

linear relationship between the values of the SRM and the AMS with the assumption of a constant residual standard deviation

[EN 14181:2004, 3.3]

NOTE The calibration function is established during QAL2 on stack gases.

2.4

competent authority

organisation which implements the requirements of EU Directives and regulates installations, which must comply with the requirements of applicable European Standards

[EN 15267-1:2009, 3.3]

2.5

confidence interval (two-sided)

when T_1 and T_2 are two functions of the observed values such that, θ being a population parameter to be estimated, the probability $P_r(T_1 \leq \theta \leq T_2)$ is at least equal to $(1 - \alpha)$ [where $(1 - \alpha)$ is a fixed number, positive and less than 1], the interval between T_1 and T_2 is a two-sided $(1 - \alpha)$ confidence interval for θ