



NSAI
Standards

Standard Recommendation
S.R. CWA 16060:2009

Environmental technology verification - Air emission abatement technologies

S.R. CWA 16060:2009

Incorporating amendments/corrigenda issued since publication:

This document replaces:

This document is based on:
CWA 16060:2009

Published:

This document was published
under the authority of the NSAI
and comes into effect on:
29 January, 2010

ICS number:
13.040.20

NSAI

1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:

T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

ICS 13.040.20

English version

Environmental technology verification - Air emission abatement technologies

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its Members.

This CEN Workshop Agreement is publicly available as a reference document from the CEN Members National Standard Bodies.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	3
Introduction	5
1 Scope	6
2 Terms and definitions	6
3 Prerequisite and general requirements	8
4 Procedure	9
5 Test process and report.....	10
5.1 General.....	10
5.2 Brief explanation of kind and purpose of the technology	11
5.3 Schematic overview of the technology or method.....	11
5.4 Technology description	11
5.5 Claim specification and review	13
5.6 Testing strategy and test description.....	13
5.7 Documentation of the test results.....	14
6 Verification	15
6.1 Interpretation.....	15
6.2 Review report.....	15
6.3 Verification report.....	17
7 Data dissemination	17
8 Liability	17
Annex A Monitoring standards for verification	18
A.1 Purpose.....	18
A.2 Over-arching conditions for standards	18
A.3 Requirements for test laboratories	18
Annex B Measurement uncertainty.....	20
B.1 Definition	20
B.2 Procedure for calculation	20
Bibliography	21

Foreword

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties on 16 September 2009, the constitution of which was supported by CEN following the public call for participation made on 15 February 2008.

The list of the organizations/entities which supported the technical consensus represented by the CEN Workshop Agreement is listed below. These organizations were drawn from the following economic sectors: suppliers offering environmental technologies, consultants, institutions and authorities dealing with environmental issues.

The formal process followed by the Workshop in the development of the CEN Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN Management Centre can be held accountable for the technical content of the CEN Workshop Agreement or possible conflict with standards or legislation. This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its members.

The final review/endorsement round for this CWA was started on 11 June 2009 and was successfully closed on 16 September 2009. The final text of this CWA was submitted to CEN for publication on 16 October 2009.

This CEN Workshop Agreement is publicly available as a reference document from the National Members of CEN: AENOR, AFNOR, ASRO, BSI, COSMT, DIN, DS, ELOT, IBN/BIN, IPQ, MSZT, NEN, NSAI, NSF, ON, SEE, SIS, SFS, SNV, STRI, SUTN, UNI.

Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN Management Centre.

The present Workshop has mainly been proposed by the AIRTV consortium, which is conducting a Specifically Targeted Research Project for developing an Environmental Technology Verification (ETV) system for air emission abatement technologies. AIRTV is supported under the 6th Framework Programme of the EU, Priority 1.1.6.3, Global Change and Ecosystems.

List of organizations/entities who have supported the CWA:

Bayrisches Landesamt für Umweltschutz, 86179 Augsburg, Germany

Dr.-Ing. Bernd Dahlhoff, 50126 Bergheim, Germany

DECHEMA Gesellschaft für Chemische Technik und Biotechnologie e. V., 60486 Frankfurt, Germany

DFIU/IFARE Deutsch-Französisches Institut für Umweltforschung, 76187 Karlsruhe, Germany

Environment Agency, PR5 8BX Preston, Great Britain

European Commission, Joint Research Centre, Institute for Prospective Technological Studies, 41092 Seville, Spain

The Federal Environment Agency Austria, 1090 Vienna, Austria

GEA Bischoff GmbH, 60388 Frankfurt, Germany

IVL Swedish Environmental Research Institute, 11427 Stockholm, Sweden

Kommission Reinhaltung der Luft im VDI und DIN, 40002 Düsseldorf, Germany

CWA 16060:2009 (E)

LEIA C.D.T., 01510 Minano Alava, Spain

TNO The Netherlands Organisation for Applied Scientific Research, 3584 CB Utrecht, The Netherlands

Typhoon, 8870 Izegem, Belgium

VITO Flemish Institute for Technological Research, 2400 Mol, Belgium

Introduction

This CEN Workshop Agreement covers three parts:

- a) a set of terms to be used consistently for all verifications in the fields of environmental technologies within the scope of this CWA;
- b) a standard reporting system demanding particular contents, graphs and tables that are mandatory and the same for all verifications;
- c) requirements for the contents of a verification report.

1 Scope

This CEN Workshop Agreement (CWA) provides a guideline for the verification of air emission abatement technologies and it specifies a reporting structure for a verified vendor claim for the performance of a specific air emission abatement technology. The technology can comprise hardware (devices, apparatus and tools), software (e.g. for process control and improvement) and physical, chemical and biotechnological processes with their adaptation to site-specific conditions.

Following this CWA gives a report for a verified product. This report provides standardized key information about an air emission abatement technology when applied. The report aims to illustrate the technology's performance and can be used to help all stakeholders (e.g. expert, regulator, administrator, potential customer) for decision making, i. e. to evaluate if a particular technology is suitable for the specific pollutant(s) and conditions for the application that is under consideration.

The CWA provides substantial input to a future European ETV system. The CWA gives guidance on technology verification on a voluntary basis to bridge the time until a European ETV system is established.

2 Terms and definitions

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

2.1 application
<environmental technology> use of an environmental technology (see 2.5) in a context defined by specifications given in respect to matrix (see 2.9) with air emissions as scope of this CWA, target (see 2.15), effect (see 2.4) and limitations

2.2 claim
performance claim
effects foreseen by the vendor of an environmental technology on the target(s) in the matrix (matrices) of the intended use

NOTE If innovative aspects have to be considered, they have to be integrated into the claim.

2.3 demonstration project
post-pilot stage, full scale implementation of an environmental technology, providing comprehensive test plans and a transparent performance documentation/reporting

2.4 effect
quantitative description how the target (see 2.15) is impacted by the application of the environmental technology, including the description of relevant side effects

2.5 environmental technology
particular system, device or method applied in the fields of environment that is based on technology or technology application, including engineering, and that is presumably, i.e. upon scientific and engineering measures, providing reproducible results

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-