

STN	Kvalita pôdy Charakterizácia kontaminovanej pôdy vo vzťahu k ochrane podzemných vôd (ISO 15175: 2018)	STN EN ISO 15175 46 5225
------------	--	--

Soil quality - Characterization of contaminated soil related to groundwater protection (ISO 15175:2018)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/19

Obsahuje: EN ISO 15175:2018, ISO 15175:2018

Oznámením tejto normy sa ruší
STN EN ISO 15175 (46 5225) z októbra 2011

128675

EUROPEAN STANDARD

EN ISO 15175

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2018

ICS 13.080.40

Supersedes EN ISO 15175:2011

English Version

**Soil quality - Characterization of contaminated soil related
to groundwater protection (ISO 15175:2018)**

Qualité du sol - Caractérisation des sols pollués en
relation avec la protection des eaux souterraines (ISO
15175:2018)

Bodenbeschaffenheit - Ermittlung von Kennwerten des
Bodens hinsichtlich des Wirkungspfad Boden (ISO
15175:2018)

This European Standard was approved by CEN on 3 December 2018.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 15175:2018 (E)

Contents	Page
European foreword.....	3

European foreword

This document (EN ISO 15175:2018) has been prepared by Technical Committee ISO/TC 190 "Soil quality" in collaboration with Technical Committee CEN/TC 345 "Characterization of soils" the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 15175:2011.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 15175:2018 has been approved by CEN as EN ISO 15175:2018 without any modification.

INTERNATIONAL STANDARD

ISO
15175

Second edition
2018-12

Soil quality — Characterization of contaminated soil related to groundwater protection

*Qualité du sol — Caractérisation des sols pollués en relation avec la
protection des eaux souterraines*



Reference number
ISO 15175:2018(E)

© ISO 2018

ISO 15175:2018(E)**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General	3
5 Assessment of direct and indirect inputs to groundwater	5
5.1 General.....	5
5.2 Relevant soil processes.....	6
5.3 Impact assessment procedures.....	7
5.4 Sensitivity and uncertainty analysis, data handling and quality.....	9
6 Tier 1 — Simple assessment	11
6.1 General.....	11
6.2 Site and soil description.....	11
6.3 Simple assessment of the potential leaching risk.....	12
7 Tier 2 — Intermediate assessment	13
7.1 General.....	13
7.2 Sampling.....	13
7.3 Characterization of soil, water and soil gas.....	13
7.3.1 General.....	13
7.3.2 Physical parameters.....	14
7.3.3 Chemical parameters.....	14
7.4 Impact assessment.....	16
7.4.1 General.....	16
7.4.2 Substance concentration in soil water.....	16
7.4.3 Amount of transferable substances.....	17
7.4.4 Degradation of organic contaminants.....	18
8 Tier 3 — Complex assessment	18
8.1 General.....	18
8.2 Biological parameters.....	18
8.3 Isotopic parameters.....	18
8.4 Geophysical parameters.....	19
Annex A (informative) Relevant parameters suggested for the physical, chemical and biological characterization of soil, water and soil gas	20
Annex B (informative) Examples of complex methods for assessing the leaching risk	27
Bibliography	36

ISO 15175:2018(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 documents 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 7, *Impact assessment*.

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.

This second edition cancels and replaces the first edition (ISO 15175:2004), which has been technically revised.

The main change concerns the focus on contaminated land management. This second edition suggests a tiered approach from simple to complex assessment in order to evaluate the impact of soil contamination of groundwater.

Soil quality — Characterization of contaminated soil related to groundwater protection

1 Scope

This document provides guidance on the principles behind, and main methods for, the evaluation of sites, soils and soil materials in relation to their role as a source of contamination of groundwater and their function in retaining, releasing and transforming contaminants. It is focused on contaminated land management identifying and listing relevant monitoring strategies, methods for sampling, soil processes and analytical methods.

2 Normative references

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN