

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 15175:2018 sisaldab Euroopa standardi EN ISO 15175:2018 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 15175:2018 consists of the English text of the European standard EN ISO 15175:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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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 Wirkungspaths Boden (ISO
15175:2018)

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

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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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of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.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.

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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).

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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.

3 Terms and definitions

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

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

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

aquifer

geological water-bearing formation (bed or stratum) of permeable rock, or unconsolidated material (e.g. sand and gravels) capable of yielding significant quantities of water

[SOURCE: ISO 5667-11:2009, 3.5]

3.2

contaminant

substance or agent present in the *soil* (3.10) as a result of human activity

Note 1 to entry: See *pollutant* (3.7).

Note 2 to entry: There is no assumption in this definition that harm results from the presence of the contaminant.

[SOURCE: ISO 11074:2015, 3.4.6, modified — a new Note 1 to entry has been added and the subsequent note has been renumbered.]

3.3

dissolved organic carbon

DOC

concentration of organic carbon remaining in solution after filtration and/or centrifugation under defined conditions

Note 1 to entry: Dissolved organic carbon is expressed in mg/l, g/m³.