
Soil quality — Sampling —
Part 2:
Guidance on sampling techniques

Qualité du sol — Échantillonnage —

Partie 2: Lignes directrices pour les techniques d'échantillonnage



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 10381 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 10381-2 was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 2, *Sampling*.

ISO 10381 consists of the following parts, under the general title *Soil quality — Sampling*:

- *Part 1: Guidance on the design of sampling programmes*
- *Part 2: Guidance on sampling techniques*
- *Part 3: Guidance on safety*
- *Part 4: Guidance on the procedure for the investigation of natural, near-natural and cultivated sites*
- *Part 5: Guidance on investigation of soil contamination of urban and industrial sites*
- *Part 6: Guidance on the collection, handling and storage of soil for the assessment of aerobic microbial processes in the laboratory*

The following parts are under preparation:

- *Part 7: Guidance on the investigation and sampling of soil gas*
- *Part 8: Guidance on the sampling of stockpiles*

Annex A of this part of ISO 10381 is for information only.

Introduction

This part of ISO 10381 is one of a group of International Standards intended to be used in conjunction with each other where necessary. It deals with various aspects of sampling for the purposes of soil investigation, including agricultural and contamination investigations, but is not applicable to investigations for geotechnical purposes.

General principles to be applied in the design of sampling programmes for the purpose of characterization of soil and identification of sources and effects of pollution of soil and related material are given in ISO 10381-1. ISO 10381-1, ISO 10381-4 and ISO 10381-5 should be consulted regarding the appropriate equipment, information about where to sample, the tests to be conducted, the type of sample, the depth of sampling, soil type and the required representativeness of the sampling system.

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Soil quality — Sampling —

Part 2:

Guidance on sampling techniques

1 Scope

This part of ISO 10381 gives guidance on techniques for taking and storing soil samples so that these can subsequently be examined for the purpose of providing information on soil quality.

This part of ISO 10381 gives information on typical equipment that is applicable in particular sampling situations to enable correct sampling procedures to be carried out and representative samples to be collected. Guidance is given on the selection of the equipment and the techniques to use to enable both disturbed and undisturbed samples to be correctly taken at different depths.

The guidance provided is intended to assist in the collection of samples for soil quality for agricultural purposes and also provide guidance for the collection of samples for contamination investigations which will require different techniques and skills.

This part of ISO 10381 makes reference to some aspects of the collection of samples of groundwater and soil gas as part of a soil sampling programme.

This part of ISO 10381 specifically does not cover investigations for geotechnical purposes, though where redevelopment of a site is envisaged the soil quality investigation and the geotechnical investigation may be beneficially combined.

This part of ISO 10381 is not applicable to the sampling of hard strata such as bedrock.

Techniques to collect information on soil quality without taking samples such as geophysical methods, are not covered by this part of ISO 10381.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 10381. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 10381 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 11074-1, *Soil quality — Vocabulary — Part 1: Terms and definitions relating to the protection and pollution of the soil*

ISO 11074-2, *Soil quality — Vocabulary — Part 2: Terms and definitions relating to sampling*

ISO 11074-4, *Soil quality — Vocabulary — Part 4: Terms and definitions related to rehabilitation of soils and sites*