



BSI Standards Publication

Soil quality — Sampling

Part 203: Investigation of potentially contaminated sites

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National foreword

This British Standard is the UK implementation of ISO 18400-203:2018.

BS ISO 18400-203:2018 is intended to be used in conjunction with BS 10175:2011+A2:2017 and other members of the BS ISO 18400 series of standards as appropriate. Where there are differences in the guidance given in this standard and that in BS 10175:2011+A2:2017, the guidance in BS 10175:2011+A2:2017 takes precedence.

The UK participation in its preparation was entrusted to Technical Committee EH/4, Soil quality.

A list of organizations represented on this committee can be obtained on request to its secretary.

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**Soil quality — Sampling —
Part 203:
Investigation of potentially
contaminated sites**

Qualité du sol — Échantillonnage —

Partie 203: Investigation des sites potentiellement contaminés



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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).

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 2, *Sampling*.

This first edition of ISO 18400-203, together with ISO 18400-104 and ISO 18400-202, cancels and replaces ISO 10381-5:2005, which has been technically and structurally revised.

The new ISO 18400 series is based on a modular structure and cannot be compared to ISO 10381-5 clause by clause.

A list of all parts in the ISO 18400 series can be found on the ISO website.

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.

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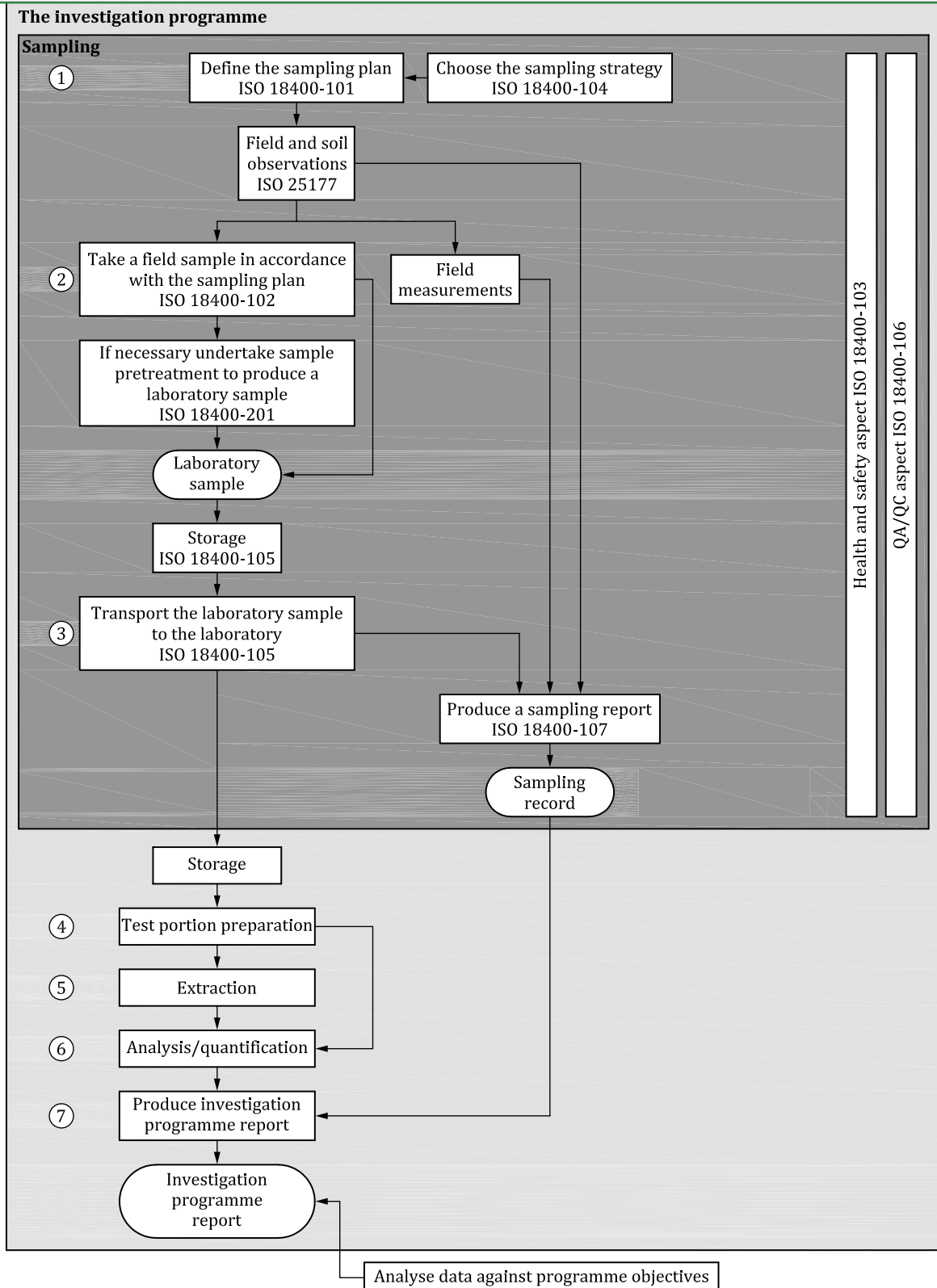
Introduction

This document is one of a series of standards dealing with various aspects of site investigation and sampling. It is intended to be used in conjunction with the other parts of the ISO 18400 series. The role/position of the individual standards within the total investigation programme is shown in [Figure 1](#).

While serious cases of soil contamination mostly occur on urban and industrial sites, serious contamination of agricultural land can also occur (for example, due to pesticides usage, long-term irrigation and application of organic wastes). In addition, it is important to recognize that agricultural, near-natural and wooded sites, etc. are sometimes developed on deposited wastes or suffer severe aerial deposition when close to industrial sites. In such cases, a combination of the methodologies described in ISO 18400-205 and in this document would be appropriate.

An understanding of the surface water, groundwater and soil gas regimes is essential to the assessment of the potential risks to human health and safety and to other potential receptors including, for example, groundwater resources. However, the provision of detailed guidance on the investigation of groundwater, surface water and soil gas falls outside the scope of this document. For more information on groundwater and surface water sampling, see ISO 5667. Guidance on the sampling of soil gas is provided in ISO 18400-204.

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NOTE 1 The numbers in circles in this figure define the key elements (1 to 7) of the investigation programme.

NOTE 2 This figure displays a generic process which can be amended when necessary.

Figure 1 — Links between the essential elements of an investigation programme

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Soil quality — Sampling —

Part 203: Investigation of potentially contaminated sites

1 Scope

This document gives guidance on the:

- investigation of sites, where either it is known that soil contamination is present, or the presence of soil contamination is suspected;
- investigation of sites where no soil contamination is expected, but the soil quality is to be determined (e.g. to make sure that there is no contamination present);
- investigation in anticipation of a need to manage re-use or disposal of excavated soil which might be contaminated;
- collection of information that is necessary for risk assessment and/or the development of remedial action plans (e.g. whether remediation is required and suggestions as to how this might be best achieved).

Although the information on soil quality for the risk assessment and/or the development of remedial action plans is gathered by applying this document, it does not give guidance on the decisions and actions that follow from a site investigation, for example, risk assessment and decisions about the requirements for remediation (if any).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 11074, *Soil quality — Vocabulary*

ISO 18400-104, *Soil quality — Sampling — Part 104: Strategies*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 11074 and ISO 18400-104 apply.

NOTE When the definitions in these two standards differ, those in ISO 18400-104 take precedence.

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/>