

SVENSK STANDARD

SS-ISO 18400-206:2021

Markundersökningar – Provtagning – Del 206: Vägledning för insamling, hantering och förvaring av jordprover för biologisk utvärdering i laboratorium (ISO 18400-206:2018, IDT)

Soil quality – Sampling – Part 206: Collection, handling and storage of soil under aerobic conditions for the assessment of microbiological processes, biomass and diversity in the



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Standarden är framtagen av kommittén för Karaktärisering av avfall, mark och slam, SIS/TK 535.

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Den internationella standarden ISO 18400-206:2018 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av ISO 18400-206:2018.

Denna standard ersätter SS-ISO 10381-6:2009, utgåva 1

The International Standard ISO 18400-206:2018 has the status of a Swedish Standard. This document contains the official English version of ISO 18400-206:2018.

This standard supersedes the SS-ISO 10381-6:2009, edition 1

LÄSANVISNINGAR FÖR STANDARDER

I dessa anvisningar behandlas huvudprinciperna för hur regler och yttre begränsningar anges i standardiseringsprodukter.

Krav

Ett krav är ett uttryck i ett dokumentets innehåll som anger objektivet verifierbara kriterier som ska uppfyllas och från vilka ingen avvikelse tillåts om efterlevnad av dokumentet ska kunna åberopas. Krav uttrycks med hjälpverbet ska (eller ska inte för förbud).

Rekommendation

En rekommendation är ett uttryck i ett dokumentets innehåll som anger en valmöjlighet eller ett tillvägagångssätt som bedöms vara särskilt lämpligt utan att nödvändigtvis nämna eller utesluta andra. Rekommendationer uttrycks med hjälpverbet bör (eller bör inte för avrådanden).

Instruktion

Instruktioner anges i imperativ form och används för att ange hur något görs eller utförs. De kan underordnas en annan regel, såsom ett krav eller en rekommendation. De kan även användas självständigt, och är då att betrakta som krav.

Förklaring

En förklaring är ett uttryck i ett dokumentets innehåll som förmedlar information. En förklaring kan uttrycka tillåtelse, möjlighet eller förmåga. Tillåtelse uttrycks med hjälpverbet får (eller motsatsen behöver inte). Möjlighet och förmåga uttrycks med hjälpverbet kan (eller motsatsen kan inte).

READING INSTRUCTIONS FOR STANDARDS

These instructions cover the main principles for the use of provisions and external constraints in standardization deliverables.

Requirement

A requirement is an expression, in the content of a document, that conveys objectively verifiable criteria to be fulfilled, and from which no deviation is permitted if conformance with the document is to be claimed. Requirements are expressed by the auxiliary shall (or shall not for prohibition).

Recommendation

A recommendation is an expression, in the content of a document, that conveys a suggested possible choice or course of action deemed to be particularly suitable, without necessarily mentioning or excluding others. Recommendations are expressed by the auxiliary should (or should not for dissuasion).

Instruction

An instruction is expressed in the imperative mood and is used in order to convey an action to be performed. It can be subordinated to another provision, such as a requirement or a recommendation. It can also be used independently and is then to be regarded as a requirement.

Statement

A statement is an expression, in the content of a document, that conveys information. A statement can express permission, possibility or capability. Permission is expressed by the auxiliary may (its opposite being need not). Possibility and capability are expressed by the auxiliary can (its opposite being cannot).

Contents

Page

Foreword	vi
Introduction	vii
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Procedure for the handling of soil samples to be used in laboratory tests with microorganisms, plants and invertebrates	2
4.1 Selection of sampling locations	2
4.2 Performance of a preliminary survey	2
4.3 Description of field site	2
4.4 Sampling conditions	3
4.5 Sampling methods.....	3
4.6 Sample marking.....	3
4.7 Transportation conditions.....	3
4.8 Soil processing in the laboratory	3
4.9 Storage conditions and storage periods	4
4.10 Pre-incubation	6
5 Sampling report	6
Bibliography	8

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 on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 4, *Biological characterization*.

This first edition of ISO 18400-206 cancels and replaces ISO 10381-6:2009, which has been technically revised.

A list of all the 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.

Introduction

Soils are both complex and heterogeneous because they consist of both living and non-living components occurring in different combinations. Therefore, the condition of the soil, from collection to completion of an experiment, is considered in this document in relation to effects on the soil organism community (i.e. microorganisms, plants and invertebrates). Temperature, water content, availability of oxygen and duration of storage are all known to affect these organisms, and thus the processes they mediate.

Soils can however be used effectively in the laboratory to investigate effects on soil organisms. In this context a distinction is made between microbial communities on the one side and plants and invertebrates on the other side, since the former are sampled as part of a soil sample, while the latter are added to a soil sample (usually only a few selected species which have been identified as test species beforehand). Therefore, this document covers two different issues:

- a) It provides guidance on the collection, handling and storage of soil for laboratory use where aerobic microbial activity is the main component of the study. It describes how to minimize the effects of differences in temperature, water content and availability of oxygen on aerobic processes to facilitate reproducible laboratory determinations^{[1][2]}.
- b) It also provides guidance on the collection, handling and storage of soil for laboratory use where the survival, reproduction, behaviour or growth of invertebrates or plants is the main components of the study. It describes how to minimize the effects of differences in temperature, and the water content as well as the fractionation of soil particles to facilitate reproducible laboratory determinations^{[1][2]}.

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

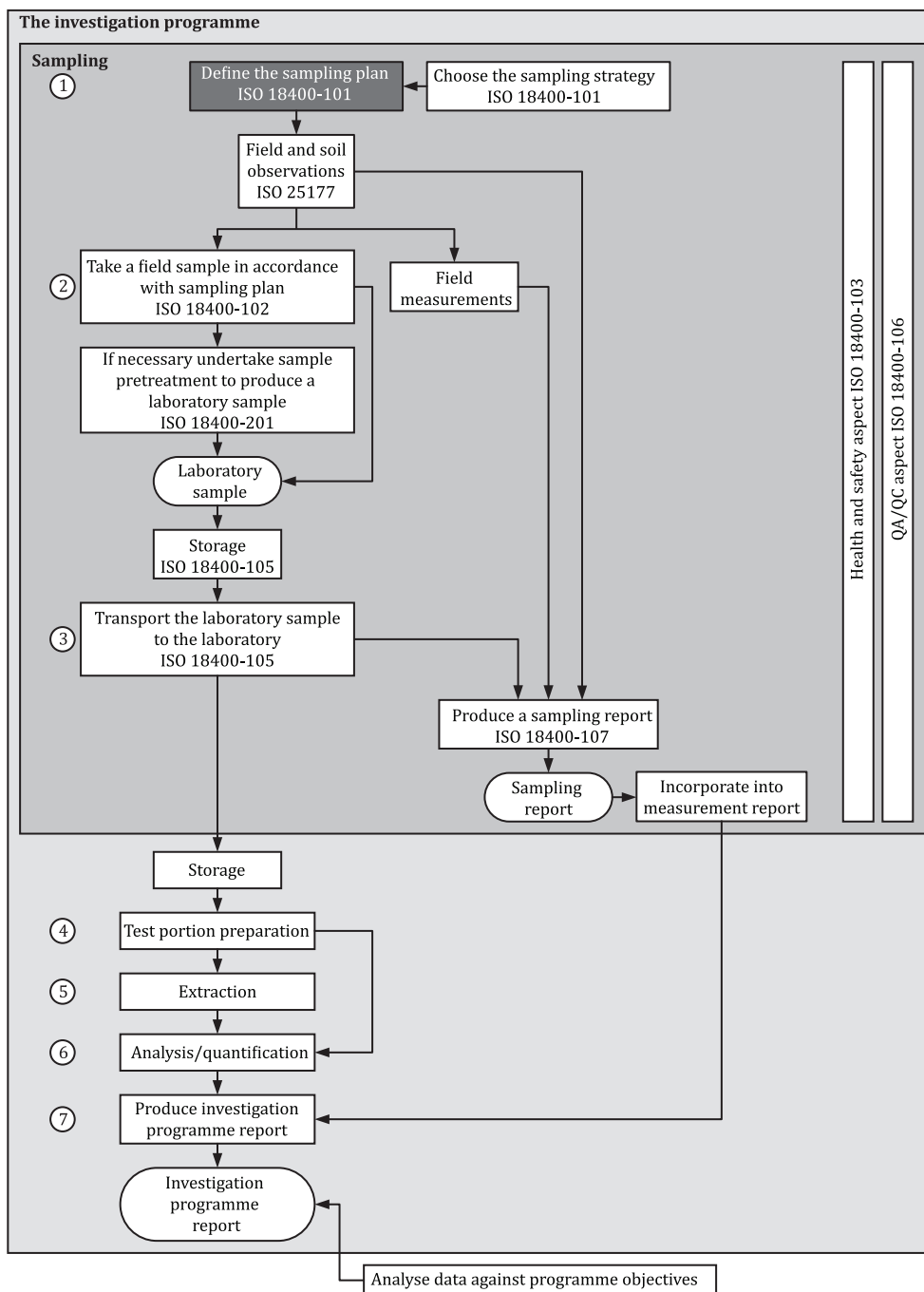


Figure 1 — Links between the essential elements of an investigation programme

NOTE 1 The numbers in circles in [Figure 1](#) define the single steps of the investigation programme.

NOTE 2 [Figure 1](#) displays a generic process which can be amended when necessary.