BS ISO 18400-106:2017

BSI Standards Publication

Soil quality — Sampling

Part 106: Quality control and quality assurance

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National foreword

This British Standard is the UK implementation of ISO 18400-106:2017.

BS ISO 18400-106:2017 is intended to be used in conjunction with BS 10175:2011+A1:2013 and other members of the BS ISO series of standards as appropriate. Where there are differences in the guidance given in this standard and that in BS 10175:2011+A1:2013, the guidance in this standard takes precedence. The UK committee notes that this standard covers a wide variety of situations in which investigations including sampling to determine soil quality might be carried out rather than being focused on potentially contaminated sites, as is the case in BS 10175:2011+A1:2013.

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.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Foreword

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

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

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Introduction

Quality assurance (QA) comprises all those measures taken to ensure that results of the investigation are "fit for purpose", including documentation, procedures to be followed, the setting of data quality objectives (i.e. for type, quality, and quantity) and reporting.

The overall quality of soil and site investigations and assessments depends on the quality of each separate step of the overall process, i.e. planning, sampling, pretreatment, analysis and evaluation, and interpretation of all results. This document only applies to sampling. Sampling is a very critical step in the whole procedure because errors made can usually not be recognized nor corrected in the laboratory or in the office afterwards.

A prerequisite for fit for purpose and reproducible analytical and test results is QA for sampling, including assuring:

— representativeness of samples;

— avoiding cross-contamination and unwanted changes or alterations of the sample during sampling, on-site pretreatment, transport, and delivery;

— making, recording, and reporting appropriate field observations;

— fit for purpose field measurements;

— a defined chain of custody process.

In Figure 1, the different steps of an investigation programme are given. This document describes the QA in the first three steps.

This document is part of a series on sampling standards for soil. The role/position of the International Standards within the total investigation programme is also shown in Figure 1.

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