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Water quality — Sampling —

Part 12:

Guidance on sampling of bottom sediments

Qualité de l'eau — Échantillonnage —

Partie 12: Guide général pour l'échantillonnage des sédiments



Reference number
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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.

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.

International Standard ISO 5667-12 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 6, *Sampling (general methods)*.

ISO 5667 consists of the following parts, under the general title *Water quality — Sampling*:

- Part 1: *Guidance on the design of sampling programmes*
- Part 2: *Guidance on sampling techniques*
- Part 3: *Guidance on the preservation and handling of samples*
- Part 4: *Guidance on sampling from lakes, natural and man-made*
- Part 5: *Guidance on sampling of drinking water and water used for food and beverage processing*
- Part 6: *Guidance on sampling of rivers and streams*
- Part 7: *Guidance on sampling of water and steam in boiler plants*
- Part 8: *Guidance on the sampling of wet deposition*
- Part 9: *Guidance on sampling from marine waters*
- Part 10: *Guidance on sampling of waste waters*
- Part 11: *Guidance on sampling of groundwaters*
- Part 12: *Guidance on sampling of bottom sediments*
- Part 13: *Guidance on sampling of sewage, waterworks and related sludges*

- *Part 14: Guidance on monitoring the quality of sampling procedures*
- *Part 15: Guidance on the preservation and handling of sludge and sediment samples*
- *Part 16: Sampling and pretreatment of samples for biotesting*

Annexes A, B, C, D, E, F, G, H, J, K, L and M of this part of ISO 5667 are for information only.

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Introduction

This part of ISO 5667 should be read in conjunction with ISO 5667-1, ISO 5667-2 and ISO 5667-3.

The general terminology used is in accordance with the various parts of ISO 6107, and more particularly, with the terminology on sampling given in ISO 6107-2.

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Water quality — Sampling —

Part 12:

Guidance on sampling of bottom sediments

1 Scope

This part of ISO 5667 provides guidance on the sampling of sedimentary materials from

- inland rivers and streams;
- lakes and similar standing bodies; and
- estuarine and harbour areas.

Industrial and sewage works sludges, palaeolimnology sampling and open ocean sediments are specifically excluded although some techniques may apply to these situations. Sampling specifically for the measurement of rates of deposition, other transport criteria and detailed strata delineation is not within the scope of this part of ISO 5667.

The investigation may have the following objectives:

- the descriptive mapping of an area;
- the monitoring at regular intervals of fixed markers such as buoys;
- examining the quality of dredger spoil; and
- fundamental research.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 5667. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 5667 are encouraged to investigate the

possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2602:1980, *Statistical interpretation of test results — Estimation of the mean — Confidence interval*.

ISO 2854:1976, *Statistical interpretation of data — Techniques of estimation and tests relating to means and variances*.

ISO 5667-1:1980, *Water quality — Sampling — Part 1: Guidance on the design of sampling programmes*.

ISO 5667-3:1994, *Water quality — Sampling — Part 3: Guidance on the preservation and handling of samples*.

ISO 9391:1993, *Water quality — Sampling in deep waters for macro-invertebrates — Guidance on the use of colonization, qualitative and quantitative samplers*.

ISO 10381-6:1993, *Soil quality — Sampling — Part 6: Guidance on the collection, handling and storage of soil for the assessment of aerobic microbial processes in the laboratory*.

3 Definitions

For the purposes of this part of ISO 5667, the following definitions apply.

3.1 composite sample: Two or more samples or subsamples mixed together in appropriate known