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Water quality - Sampling - Part 13: Guidance on sampling of sludges (ISO 5667-13:2011)

EESTI STANDARDI EESSÕNA

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NATIONAL FOREWORD

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English Version

Water quality - Sampling - Part 13: Guidance on sampling of sludges (ISO 5667-13:2011)

Qualité de l'eau - Échantillonnage - Partie 13: Lignes directrices pour l'échantillonnage de boues (ISO 5667-13:2011)

Wasserbeschaffenheit - Probenahme - Teil 13: Anleitung zur Probenahme von Schlämmen (ISO 5667-13:2011)

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Foreword

This document (EN ISO 5667-13:2011) has been prepared by Technical Committee ISO/TC 147 "Water quality" in collaboration with Technical Committee CEN/TC 308 "Characterization of sludges" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2011, and conflicting national standards shall be withdrawn at the latest by November 2011.

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Endorsement notice

The text of ISO 5667-13:2011 has been approved by CEN as a EN ISO 5667-13:2011 without any modification.

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Introduction

This part of ISO 5667 should be read in conjunction with ISO 5667-1 and ISO 5667-15. The general terminology used is in accordance with the various parts of ISO 6107.

Sampling and the determination of the physical and chemical properties of sludges and related solids are normally carried out for a specific purpose. The sampling methods given are suitable for general use but do not exclude modification in the light of any special factor known to the analyst receiving the samples or any operational reason dictating the need for sampling. Personnel taking samples should be fully aware of safety requirements before sampling occurs.

The importance of using a valid sampling technique cannot be overemphasized if the subsequent analysis is to be worthwhile. It is important that the personnel taking and analysing the sample be fully aware of its nature and the purpose for which the analysis is required before embarking on any work programme. Full cooperation with the laboratory analysing the samples ensures that the most effective application of the sampling occasion can be made. For example, the use of method-specific sample preservation techniques assists in the accurate determination of results.

This part of ISO 5667 is applicable to sampling motivated by different objectives, some of which are to:

- a) provide data for the operation of activated sludge plants;
- b) provide data for the operation of sludge treatment facilities;
- c) determine the concentration of pollutants in wastewater sludges for disposal to landfill;
- d) test whether prescribed substance limits are contravened when sludge is used in agriculture;
- e) provide information on process control in potable and wastewater treatment, including:
 - 1) addition or withdrawal of solids,
 - 2) addition or withdrawal of liquid;
- f) provide information for legally enforceable aspects of the disposal of sewage and waterworks sludges;
- g) facilitate special investigations into the performance of new equipment and processes;
- h) optimize costs, e.g. for the transport of sludges for treatment or disposal.

When designing a sludge sampling programme, it is essential that the objectives of the study be kept in mind, so that the information gained corresponds to that required. In addition, the data should not be distorted by the use of inappropriate techniques, e.g. inadequate sample storage temperatures or the sampling of unrepresentative parts of a sludge-treatment plant.

Water quality — Sampling —

Part 13:

Guidance on sampling of sludges

WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

1 Scope

This part of ISO 5667 gives guidance on the sampling of sludges from wastewater treatment works, water treatment works and industrial processes. It is applicable to all types of sludge arising from these works and also to sludges of similar characteristics, e.g. septic tank sludges. Guidance is also given on the design of sampling programmes and techniques for the collection of samples.

2 Normative references

The following referenced documents are indispensable for the application 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 5667-1, *Water quality — Sampling — Part 1: Guidance on the design of sampling programmes and sampling techniques*

ISO 5667-10:1992, *Water quality — Sampling — Part 10: Guidance on sampling of waste waters*

ISO 5667-12, *Water quality — Sampling — Part 12: Guidance on sampling of bottom sediments*

ISO 5667-14, *Water quality — Sampling — Part 14: Guidance on quality assurance of environmental water sampling and handling*

ISO 5667-15:2009, *Water quality — Sampling — Part 15: Guidance on the preservation and handling of sludge and sediment samples*

ISO 6107 (all parts), *Water quality — Vocabulary*

ISO/TR 8363, *Measurement of liquid flow in open channels — General guidelines for selection of method*

ISO 18283, *Hard coal and coke — Manual sampling*

CEN/TR 13097, *Characterization of sludges — Good practice for sludge utilisation in agriculture*