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საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტო 0)ბ0ლ0ს0

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1 შემშშამებშლია საქართველოს ს<sub>ტ</sub>ანდარ<sub>ტ</sub>ების, <sub>ტ</sub>ექნიკური რეგლამენ<sub>ტ</sub>ების და მე<sub>ტ</sub>როლოგიის ეროვნული სააგენ<sub>ტ</sub>ოს ს<sub>ტ</sub>ანდარ<sub>ტ</sub>ებისა და <sub>ტ</sub>ექნიკური რეგლამენ<sub>ტ</sub>ების ღეპარ<sub>ტ</sub>ამენ<sub>ტ</sub>ის მიერ

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5 რმ80სტრ0რმბშლ0ა საქართველოს ს<sub>ტ</sub>ანდარ<sub>ტ</sub>ების, <sub>ტ</sub>ექნიკური რეგლამენ<sub>ტ</sub>ების და მე<sub>ტ</sub>როლოგიის ეროვნული სააგენ<sub>ტ</sub>ოს რეეს<sub>ტ</sub>რში: 2011 წლის 20 ივნისი №268-1.3-5087

წინამღებარე სგანღარგის სრული ან ნაწილობრივი აღწარმოება, გირაჟირება ღა გავრცელება საქართველოს სგანღარგების, გექნიკური რეგლამენგების ღა მეგროლოგიის ეროვნული სააგენგოს ნებართვის გარეშე არ ღაიშვება

# INTERNATIONAL STANDARD



First edition 2006-08-01

# Water quality — Sampling for microbiological analysis

Qualité de l'eau — Échantillonnage pour analyse microbiologique



Reference number ISO 19458:2006(E)

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Published in Switzerland

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### Foreword

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The main task of technical committees is to prepare International Standards. 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.

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.

ISO 19458 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 4, *Microbiological methods*.

### Introduction

Appropriate sampling is essential to provide representative samples to the laboratory in charge of testing. Sampling features depend on the objective of sampling, but also on the nature of the sample. Microorganisms are living organisms. In addition, when they are introduced into water, they do not form a perfect solution, but a suspension with an inherent degree of variability.

Sampling objectives may serve different purposes, which are described in the ISO 5667 series of standards (ISO 5667-1, ISO 5667-2 and ISO 5667-3):

- a) determination of the compliance of a water with a regulatory quality specification;
- b) characterization of any contamination, its level (mean) and its variations:
  - 1) what is its random variation?
  - 2) is there a trend?
  - 3) are there cycles?
- c) identification of the sources of pollution.

Regarding the number or frequency of samples, it will vary according to the aim of the sampling.

The minimum number of samples will be low if the mean concentration differs greatly from the specification (much lower or much higher), and the minimum number of samples will be higher if the mean concentration and the specification are close to one another. Similarly, in case b), when looking for a trend: the less obvious the trend, the higher the frequency of sampling (see also Annex A).