Second edition
2006-04-15

Water quality — Sampling —

Part 5: Guidance on sampling of drinking water from treatment works and piped distribution systems

Qualité de l'eau — Échantillonnage —

Partie 5: Lignes directrices pour l'échantillonnage de l'eau potable des usines de traitement et du réseau de distribution

Reference number
ISO 5667-5:2006(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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 5667-5 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 6, *Sampling (general methods)*.

This second edition cancels and replaces the first edition (ISO 5667-5:1991), which has been technically revised.

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

— *Part 1: Guidance on the design of sampling programmes and sampling techniques* [1)]

— *Part 3: Guidance on the preservation and handling of water samples*

— *Part 4: Guidance on sampling from lakes, natural and man-made*

— *Part 5: Guidance on sampling of drinking water from treatment works and piped distribution systems*

— *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 sludges from sewage and water-treatment works*

---

1) ISO 5667-1:1980 and ISO 5667-2:1981 are currently undergoing joint revision, which will be published as ISO 5667-1.

— *Part 14: Guidance on quality assurance of environmental water sampling and handling*

— *Part 15: Guidance on preservation and handling of sludge and sediment samples*

— *Part 16: Guidance on biotesting of samples*

— *Part 17: Guidance on sampling of suspended sediments*

— *Part 18: Guidance on sampling of groundwater at contaminated sites*

— *Part 19: Guidance on sampling of marine sediments*

The following part is under preparation:

— *Part 20: Guidance on the use of sampling data for decision making — Compliance with limits and classification*

Introduction

ISO 5667 is a group of standards dealing with the general aspects of sampling (Parts 1 to 3) and with the sampling of specific types of water (from Part 4 onwards). ISO 5667-5 covers the sampling of drinking water within a piped distribution system and should be read in conjunction with ISO 5667-1 and ISO 5667-3.

Effective monitoring of drinking water requires collaboration between sampling programme designers, water treatment plant and distribution system operators, sample collectors, laboratory analysts and data users. ISO 5667-5 gives guidance on the selection of sampling locations and the collection of samples when monitoring drinking water from treatment plants and from piped distribution systems.

Understanding of the purposes for monitoring drinking water and of the principles behind the methods of analysis is important, since specific sampling protocols can vary widely in accordance with different purposes and different analytical methods.

Examples of sampling purposes include:

a) checking of drinking water to ensure compliance with national and/or international regulations (e.g. WHO *Guidelines for Drinking Water Quality* [1] and the EU Drinking Water Directive [2]);

b) determination of the efficiency of a drinking water treatment plant or components thereof (for example, disinfection);

c) quality monitoring of the water leaving the treatment plant;

d) quality monitoring of the water within the distribution system (including distribution within large buildings);

e) search for the cause of contamination of the distribution system (for example, in response to customer complaints);

f) monitoring of the corrosive potential of drinking water to plumbing;

g) assessment of the effects of materials in contact with water on the water quality (chemical and biological);

h) monitoring of the influent water and the various processing stages in a food or beverage processing plant, including necessary treatment steps.