

BS 8551:2015



BSI Standards Publication

**Provision and management
of temporary water supplies
and distribution networks
(not including provisions for
statutory emergencies) –
Code of practice**

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Published by BSI Standards Limited 2015

ISBN 978 0 580 86307 3

ICS 13.060.20

The following BSI references relate to the work on this document:

Committee reference EH/3

Draft for comment 15/30299654 DC

Publication history

First published December 2011

Second (current) edition September 2015

Amendments issued since publication

Date	Text affected
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This document comprises a front cover, an inside front cover, pages i to vi, pages 1 to 54, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI and came into effect on 30 September 2015. It was prepared by BSI Panel EH/3/-/1, *Panel for BS 8551*, under the authority of Technical Committee EH/3, *Water quality*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

BS 8551:2015 supersedes BS 8551:2011, which is withdrawn.

Information about this document

This is a full revision of the standard to keep it up to date.

This document is intended for application when there is a temporary loss of a piped water supply or where there is a limited or no piped water supply available that is not the responsibility of a water undertaker or licensed water supplier (e.g. burst of private supply pipe). It is also intended to be applicable to the provision of temporary water distribution systems for public events or construction sites.

Use of this document

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

All personnel involved in the deployment and use of tankers, static tanks and bowsers (for drinking water purposes) are expected to hold the National Water Hygiene Card

(see <https://www.eusr.co.uk/eusr/the-eusr-card/the-national-water-hygiene-card>) [viewed: 14 September 2015].

Test laboratory accreditation. Users of this British Standard are advised to consider the desirability of selecting test laboratories that are accredited to BS EN ISO/IEC 17025 by a national or international accreditation body.

A list of accredited laboratories is provided at www.dwi.gov.uk [viewed: 14 September 2015].

WARNING. This British Standard calls for the use of substances and/or procedures that can be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

The word "should" is used to express recommendations of this standard. The word "may" is used in the text to express permissibility, e.g. as an alternative to the primary recommendation of the Clause. The word "can" is used to express possibility, e.g. a consequence of an action or an event.

Notes and commentaries are provided throughout the text of this standard. Notes give references and additional information that are important but do not form part of the recommendations. Commentaries give background information.

Contractual and legal considerations

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

Compliance with a British Standard cannot confer immunity from legal obligations.

In particular, attention is drawn to the following statutory regulations.

- Water Industry Act 1991 [1];
- The Water and Sewerage Services (Northern Ireland) Order 2006, as amended [2];
- The Water (Scotland) Act 1980, as amended [3];
- Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption [4];
- The “Water Quality Regulations”, which set out provisions for the quality of drinking water provided by a public water supplier (water undertaker):
 - The Water Supply (Water Quality) Regulations 2000, as amended, in England [5];
 - The Water Supply (Water Quality) Regulations 2010, as amended, in Wales [6];
 - The Water Supply (Water Quality) Regulations (Northern Ireland) 2007, as amended, in Northern Ireland [7];
 - The Public Supply Water Supplies (Scotland) Regulations 2014, in Scotland [8];
- The “Private Water Supplies Regulations”, which set out provisions for the quality of water from a private supply:
 - The Private Water Supplies Regulations 2009, as amended, in England [9];
 - The Private Water Supplies (Wales) Regulations 2010, as amended, in Wales [10];
 - The Private Water Supplies (Northern Ireland) Regulations 2009, as amended, in Northern Ireland [11];
 - The Private Water Supplies (Scotland) Regulations 2006, in Scotland [12];
- The “Water Fittings Regulations”, which set out provisions for plumbing systems in premises to which a supply of public mains water has been provided:
 - The Water Supply (Water Fittings) Regulations 1999, in England and Wales [13];
 - The Water Supply (Water Fittings) Regulations (Northern Ireland) 2009, in Northern Ireland [14];
 - The Water Supply (Water Fittings) (Scotland) Byelaws 2014, in Scotland [15];
- The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) Regulations 2007, as amended [16];
- The Natural Mineral Water, Spring Water and Bottled Drinking Water (Wales) Regulations 2007, as amended [17];

- The Natural Mineral Water, Spring Water and Bottled Drinking Water (Northern Ireland) Regulations 2007, as amended [18];
- The Natural Mineral Water, Spring Water and Bottled Drinking Water (Scotland) Regulations 2007, as amended [19];
- The Workplace (Health, Safety and Welfare) Regulations 1992 [20];
- The Control of Substances Hazardous to Health Regulations 2002 (COSHH) [21];
- The Control of Substances Hazardous to Health Regulations (Northern Ireland) 2003 [22];
- The Health and Safety at Work etc. Act 1974, as amended [23].

NOTE Bottled water held in storage for emergency uses has to be suitable for supply under the same Regulations [5], [6], [7] and [8] as that which is supplied through the distribution network.

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0 Introduction

The provision of safe, clean drinking water is essential to support public health and well-being.

Where there is a need to provide a temporary supply of water for domestic purposes¹⁾ (i.e. drinking, washing, cooking, central heating and sanitary purposes) this British Standard provides guidance which, if followed carefully, can help ensure the wholesomeness²⁾ of the temporary water supply.

Temporary water supplies can be provided by various means, including:

- water delivered in bottles, containers, tankers, bowsers, static tanks; or
- piped supplies from a public main; or
- water delivered as above, but derived from a private source, such as boreholes, springs, wells and river abstraction schemes.

Water supplied by a licensed water undertaker needs to conform to the Water Quality Regulations [5], [6], [7] and [8]. Any water fitting supplied with water by a water undertaker has to conform to the Water Fittings Regulations [13], [14] and [15]. Water supplied by an alternative source, such as a private water supply, needs to conform to the Private Water Supply Regulations [9], [10], [11] and [12]. Water supplied via a stand-alone vessel or tanker is not covered by these Regulations. However, it is necessary that all installations, regardless of source, satisfy the provisions of the Water Fittings Regulations [13], [14] and [15].

This standard acknowledges the duty to ensure that temporary supplies are wholesome.

This standard gives guidance on the provision of an appropriate management system(s) for temporary water supplies capable (through documentation) of demonstrating to the water supplier and/or the local authority that all necessary procedural steps have been carried out.

Management systems assist in ensuring wholesomeness of the water supplied and demonstrate due diligence by the relevant people (for private supplies) or the water undertaker (for public supplies) in relation to Water and Health and Safety Law³⁾ and its applies to temporary water supplies.

Guidance is also given on the preparation and use of temporary water transfer vessels which can be pre-prepared and stored ready for collection and deployment, either for stand-alone use or for connection to a temporary network.

In addition to the temporary supply of wholesome water, this standard covers methods of extraction of water from a wholesome supply and its subsequent transfer to the point of use.

¹⁾ As defined in the Water Industry Act 1991, as amended (for England and Wales) [1], and corresponding Acts in Scotland and Northern Ireland [2] and [3].

²⁾ As defined in the Water Quality Regulations [5], [6], [7] and [8] or the Private Water Supplies Regulations [9], [10], [11] and [12] depending on where the water is sourced.

³⁾ Those responsible for the provision of temporary supplies are subject to the requirements of the Health and Safety at Work etc. Act 1974 [23].

1 Scope

This British Standard gives recommendations and guidance for the provision and management of temporary water supplies and distribution networks to ensure the water supplied for domestic purposes is wholesome. It is applicable to situations when a permanent supply is insufficient, not available or not required, for example, at building sites and outdoor public events.

NOTE The drinking water regulators, water undertakers and local authorities have in place collective arrangements for dealing with operational events, incidents and emergencies in relation to both public and private water supplies, and they ought always to be informed and/or consulted before a temporary water supply arrangement is put in place.

The standard gives recommendations and guidance on procedures and documentation for:

- a) risk assessment and management;
- b) supplying, maintaining and cleaning vessels used to collect and transport wholesome water or function as temporary supply points;
- c) storage and quality control of bottled water stocks intended for temporary supply;
- d) connecting to a permanent distribution network for extraction purposes, avoiding contamination risks;
- e) installing temporary water storage vessels and temporary pipework for distribution networks serving temporary water draw-off points whilst avoiding contamination risks; and
- f) monitoring and sampling.

This British Standard is intended to provide guidance on good practice related to anticipated temporary water supplies and installation of temporary distribution networks, but its principles are applicable to contingency arrangements for water supply incidents and emergencies.

The British Standard also gives guidance on water supply hygiene and management practices which can involve staff training and/or operational procedures.

The British Standard relates to the supply of water that has already been treated to make it safe for drinking, and its provisions are intended to prevent contamination.

The British Standard is not applicable to:

- 1) the use and maintenance of large-bottle water dispensers, for example, the bottles often used in office water coolers/dispensers (although the management of stocks of water held for use in such devices is covered);
- 2) the dispensing of the water supplied from vessels which are managed outside a predefined management regime, such as:
 - i) personalized utensils (for example, sports water bottles or personal filters);
 - ii) personal portable containers designed for carrying water; and
 - iii) vending machines;
- 3) the supply of water for the flushing of toilets/urinals only; and
- 4) the extraction and treatment of raw water from springs, streams, wells, boreholes, lakes, rain or seawater as part of the provision of either a public or private water supply (regulated activity).