

SCHEDULE 5

Regulations 15 and 16

ANALYTICAL METHODOLOGY

Table A1**Parameters for which, subject to Regulation 15(7), methods of analysis are specified**

<i>(1) Parameter</i>	<i>(2) Method of analysis</i>
E. coli and coliform bacteria	EN ISO 9308-1 M1 or EN ISO 9308-2 M2
Enterococci	EN ISO 7899-2 M3
Pseudomonas aeruginosa	EN ISO 16266 M4
Enumeration of culturable microorganisms – colony count 22°C	EN ISO 6222 M5
Enumeration of culturable microorganisms – colony count 36°C	EN ISO 6222
<i>Clostridium perfringens</i> including spores	EN ISO 14189 M6

Marginal Citations

- M1** This standard entitled “*Water quality - Enumeration of Escherichia coli and coliform bacteria - Part 1: Membrane filtration method for waters with low bacterial background flora (ISO 9308-1:2014)*” was approved by the European Committee for Standardization (CEN) on 18 January 2017. Under reference BS EN ISO 9308-1:2014+A1:2017, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 92379 1).
- M2** This standard entitled “*Water quality - Enumeration of Escherichia coli and coliform bacteria - Part 2: Most probable number method (ISO 9308-2:2012)*” was approved by the European Committee for Standardization (CEN) on 11 April 2014. Under reference BS EN ISO 9308-2:2014, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 84023 4).
- M3** This standard entitled “*Water quality - Detection and enumeration of intestinal enterococci - Part 2: Membrane filtration method (ISO 7899-2:2000)*” was approved by the European Committee for Standardization (CEN) on 11 April 2014. Under reference BS EN ISO 7899-2:2000, it is published as a UK standard by the British Standards Institution (ISBN 0 580 34953 5).
- M4** This standard entitled “*Water quality - Detection and enumeration of Pseudomonas aeruginosa - Method by membrane filtration (ISO 16266:2006)*” was approved by the European Committee for Standardization (CEN) on 11 January 2008. Under reference BS EN ISO 16266:2008, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 59736 7).
- M5** This standard entitled “*Water quality - Enumeration of culturable micro-organisms - Colony count by inoculation in a nutrient agar culture medium (ISO 6222:1999)*” was approved by the European Committee for Standardization (CEN) on 16 March 1999. Under reference BS EN ISO 6222:1999, it is published as a UK standard by the British Standards Institution (ISBN 0 580 32495 8).

Changes to legislation: There are currently no known outstanding effects for the The Water Supply (Water Quality) Regulations 2018, SCHEDULE 5. (See end of Document for details)

M6 This standard entitled *Water quality - Enumeration of Clostridium perfringens - Method using membrane filtration (ISO 14189:2013)*” was approved by the European Committee for Standardization (CEN) on 15 July 2016. Under reference BS EN ISO 14189:2016, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 92184 1).

Table A2

Parameters in relation to which methods of analysis must satisfy prescribed characteristics

F1

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Textual Amendments

F1 Sch. 5 Table A2 revoked (1.1.2020 following 11.59 pm on 31.12.2019) by [The Water Supply \(Water Quality\) Regulations 2018 \(S.I. 2018/647\)](#), reg. **39(3)**

Table A3

Minimum performance characteristic “uncertainty of measurement”

The uncertainty of measurement laid down in this table must not be used as an additional tolerance to the parametric values set out in Schedules 1 and 2.

<i>(1) Parameter</i>	<i>(2) Uncertainty of measurement % of the parametric value (except for pH) ¹</i>
Aluminium	25
Ammonium	40
Antimony	40
Arsenic	30
Benzene	40
Benzo(a)pyrene ²	50
Boron	25
Bromate	40
Cadmium	25
Chloride	15
Chromium	30
Colour	20
Conductivity	20
Copper	25
Cyanide ³	30
1,2-dichloroethane	40

Fluoride	20
Hydrogen ion concentration pH (expressed in pH units)	0.2
Iron	30
Lead	25
Manganese	30
Mercury	30
Nickel	25
Nitrate	15
Nitrite	20
Oxidisability ⁴	50
Pesticides ⁵	30
Polycyclic aromatic hydrocarbons ⁶	50
Selenium	40
Sodium	15
Sulphate	15
Tetrachloroethene ⁶	30
Tetrachloromethane	30
Trichloroethene ⁷	40
Trihalomethanes: total ⁶	40
Total organic carbon ⁸	30
Turbidity ⁹	30

Notes:

¹ “Uncertainty of measurement” is a non-negative parameter characterising the dispersion of the quantity values being attributed to a measurement, based on the information used. The performance criterion for measurement uncertainty (k = 2) is at least the percentage of the parametric value stated in the table. If the value of uncertainty of measurement cannot be met, the best available technique must be selected (up to 60 % of the parametric value).

² The method determines total cyanide in all forms.

³ Reference method: European standard EN ISO 8467 entitled “Water quality - Determination of permanganate index (ISO 8467)”^{M7}.

⁴ The performance characteristics for individual pesticides are given as an indication. Values for the uncertainty of measurement as low as 30% can be achieved for several pesticides, higher values up to 80% may be allowed for a number of pesticides.

⁵ The performance characteristics apply to individual substances, specified at 25% of the parametric value in Part 1 of Table B in Schedule 1.

⁶ The performance characteristics apply to individual substances, specified at 50 % of the parametric value in Part 1 of Table B in Schedule 1.

⁷ The uncertainty of measurement must be estimated at the level of 3 mg/l of the total organic carbon (TOC) in accordance with European standard EN 1484 entitled “Water analysis - Guidelines for the determination of total organic carbon and dissolved organic carbon”^{M8} and dissolved organic carbon (DOC) shall be used.

Changes to legislation: There are currently no known outstanding effects for the The Water Supply (Water Quality) Regulations 2018, SCHEDULE 5. (See end of Document for details)

⁸ The uncertainty of measurement must be estimated at the level of 1,0 NTU in accordance with European standard EN ISO 7027-1 entitled “Water quality - Determination of turbidity - Part 1: Quantitative methods (ISO 7027-1)”^{M9}.

Marginal Citations

- M7** This standard was approved by the European Committee for Standardization (CEN) on 3 November 1994. Under reference EN ISO 8467:1995, it is published as a UK standard by the British Standards Institution (ISBN 0 580 23435 5).
- M8** This standard was approved by the European Committee for Standardization (CEN) on 6 April 1997. Under reference BS EN 1484:1997, it is published as a UK standard by the British Standards Institution (ISBN 0 580 28372 0).
- M9** This standard was approved by the European Committee for Standardization (CEN) on 15 April 2016. Under reference BS EN ISO 7027-1:2016, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 81961 2)

Changes to legislation:

There are currently no known outstanding effects for the The Water Supply (Water Quality) Regulations 2018, SCHEDULE 5.