

2017 No.

WATER, ENGLAND AND WALES

**The Water Supply (Water Quality) (Amendment) Regulations
2017**

Made - - - - - ***
Laid before Parliament ***
Coming into force - - - ***

The Secretary of State makes these Regulations in exercise of the powers conferred by section 2(2) of the European Communities Act 1972(a).

The Secretary of State has been designated for the purposes of section 2(2) of the European Communities Act 1972 in relation to the environment(b).

Citation, commencement and interpretation

1.—(1) These Regulations may be cited as the Water Supply (Water Quality) (Amendment) Regulations 2017 and come into force on 27th October 2017.

(2) In these Regulations, “the 2016 Regulations” means the Water Supply (Water Quality) Regulations 2016(c).

Amendment of the 2016 Regulations

2. The 2016 Regulations are amended as follows.

Amendment of regulation 2 of the 2016 Regulations

3.—(1) Regulation 2 (interpretation) is amended as follows

(2) In paragraph (1)—

(a) omit the definition of—

- (i) audit monitoring; and
- (ii) check monitoring;

(b) insert in the relevant places—

““*E-coli*” means *Escherichia coli*.”

““monitoring of a Group A parameter” has the meaning given in regulation 5(1)”; and

(a) 1972 c. 68. Section 2(2) was amended by the Legislative and Regulatory Reform Act 2006 (c. 51), Part 3, section 27(1); and the European Union (Amendment) Act 2008 (c. 7), Part 1 of the Schedule.

(b) S.I. 2008/301.

(c) S.I. 2016/614.

““monitoring of a Group B parameter” has the meaning given in regulation 5(3)”.

““monitoring programme” is the identification and collection of data to confirm compliance with the prescribed concentrations in Schedule 1 and any substance or organism identified during a risk assessment. This may consist of:

- (a) collection and analysis of discrete water samples; or
- (b) measurements recorded by a continuous monitoring process.

or a combination of both of the methods described in sub-paragraphs (a) and (b) at the frequency required in Schedule 3 or at a frequency notified to the water undertaker or

In addition a monitoring programme may consist of:

- (c) inspections of records of the functionality and maintenance status of equipment; and/or
- (d) inspections of the catchment area, water abstraction, treatment, storage and distribution infrastructure;”

““suitably accredited body” means any person accredited by the United Kingdom Accreditation Service(a);”;

- (c) for paragraph (3) substitute—

“(3) Subject to paragraph (4), references in these Regulations to a service reservoir are references to any structure in which a reserve of water that has been treated with a view to complying with the requirements of regulation 4 is contained and stored for the sole purpose or meeting a variable demand for the supply of water.”.

Amendment of regulation 4 of the 2016 Regulations

4.—(1) Regulation 4 (wholesomeness) is amended as follows.

(2) In paragraph (1), after the words “Water supplied to premises” insert the words “that is intended for human consumption including”.

Amendment of regulation 5 of the 2016 Regulations

5.—(1) Regulation 5 (interpretation and application of Part 4) is amended as follows.

(2) For paragraphs (1) to (3) substitute—

“(1) In this Part, “monitoring of a Group A parameter” means monitoring for the purpose of obtaining information at regular intervals—

- (a) as to the organoleptic and microbiological quality of water;
- (b) where relevant, as to the effectiveness of drinking water treatment, particularly for the purposes of disinfection, for the purposes referred to in paragraph (2); and
- (c) as regards indicator parameters, whether water supplied for regulation 4(1) purposes meets the specifications for those parameters.

(2) The purpose of monitoring of a Group A parameter is to determine whether the presence of such a parameter in water supplied for regulation 4(1) purposes satisfies the provisions of Part 3 or, if a departure has been authorised under Part 7 in relation to that supply, the provisions of Part 3 as read with the terms of that departure.

(3) In this Part, “monitoring of a Group B parameter” means monitoring for the purpose of obtaining information from which it may be established—

- (a) whether water supplied for regulation 4(1) purposes satisfies the provisions of Part 3 or, if a departure has been authorised under Part 7 in relation to that supply, the provisions of Part 3 as read with the terms of that departure;

(a) See S.I. 2009/3155 as to the establishment of the United Kingdom Accreditation Service.

- (b) as regards indicator parameters, whether water supplied for regulation 4(1) purposes meets the specifications for those parameters;
 - (c) in respect of certain other parameters which may be identified as relevant by the Secretary of State in the monitoring programme, where necessary, following a risk assessment conducted under regulation 9.”.
- (3) After paragraph (5) insert—
- “(6) In this regulation—
- “Group A parameter” means a parameter specified in column 2 of Table 1 in Schedule 3;
- “Group B parameter” means a parameter specified in column 2 of Table 2 or Table 3 in Schedule 3.”.

Amendment of regulation 6 of the 2016 Regulations

- 6.—(1) Regulation 6 (monitoring: general provisions) of the 2016 Regulations is amended as follows.
- (2) For paragraph (5) substitute—
- “(5) Compliance samples for certain chemical parameters, in particular copper, lead and nickel must take the form of a random daytime sample of one litre volume taken from a consumer’s tap without prior flushing.”.
- (3) In paragraph (16)(a), for “48 hours after” substitute “at”.

Amendment of regulation 9 of the 2016 Regulations

- 7.—(1) For regulation 9 of the 2016 Regulations, substitute—

“Number of samples

9.—(1) In each year a water undertaker must take or cause to be taken from its sampling points, or to the extent authorised under regulation 8, from its supply points, the standard number of samples for analysis of residual disinfectant and each parameter listed in—

- (a) column (2) of Table 1 in Schedule 3 (Group A parameters);
- (b) column (2) of Table 2 in Schedule 3 (Group B1 parameters);
- (c) column (2) of Table 3 in Schedule 3 (Group B2 parameters);
- (d) column (2) of Table 4 in Schedule 3 (Group A1 parameters);
- (e) column (2) of Table 5 in Schedule 3 (Group A2 parameters);
- (f) column (2) of Table 6 in Schedule 3 (Group A3 parameters);
- (g) column (2) of Table 7 in Schedule 3 (Group A4 parameters).

- (2) Samples required to be taken by this regulation—

- (a) must be taken at regular intervals;
- (b) with the exception of sampling at the consumer’s tap, all sampling for chemical parameters in the distribution network must be in accordance with ISO 5667-5; and
- (c) in respect of microbiological parameters, must be taken and handled according to EN ISO 19458, sampling purpose A in the distribution network and EN ISO 19458, sampling purpose B, at the consumer’s tap.

(3) The Secretary of State may by notice in writing notify a water undertaker which supplies of water supplied by the water undertaker in a water supply zone, treatment works, supply points and service reservoirs may be subject to variation, with the common exception of *E.coli* in respect of—

- (a) the number of samples which an undertaker must take for the period specified in the notice, whether the effect of the variation is to increase or decrease the extent of sampling prescribed by paragraph (1); and
 - (b) the number of parameters subject to monitoring by virtue of paragraph (1), which the Secretary of State may by notice vary by way of an increase or decrease.
- (4) The Secretary of State may give a notice under paragraph (3)—
- (a) on the Secretary of State's own motion; or
 - (b) where paragraph (6) applies, upon application by a water undertaker.
- (5) A notice under paragraph (3)—
- (a) must specify the extent of the deviation from the standard number of samples required to be taken under paragraph (1);
 - (b) must specify which parameters, if any, are not subject to the obligation described in paragraph (1);
 - (c) may require a risk assessment to be undertaken;
 - (d) may be revoked or varied by the Secretary of State.
- (6) This paragraph applies where—
- (a) a risk assessment complying with this regulation has been undertaken;
 - (b) the results of the risk assessment described in paragraph (a) are considered, and that risk assessment indicates that no factor can be reasonably anticipated to be likely to cause deterioration of the quality of the water;
 - (c) the results from samples taken in respect of a parameter collected at regular intervals over three years must all be at less than 30% of the parametric value, in the case that the water undertaker seeks to cease monitoring a particular parameter; and
 - (d) the results from samples taken in respect of a parameter collected at regular intervals over three years must all be at less than 60% of the parametric value, in the case that the water undertaker seeks to reduce the frequency of monitoring in respect of that parameter.
- (7) The Secretary of State must by notice in writing withdraw a notice under paragraph (3) if the Secretary of State believes that water supplied in the zone in question for regulation 4(1) purposes gives rise to a level that is likely to exceed the parametric value in respect of a particular parameter.
- (8) A water undertaker which receives a notice under paragraph (3) must institute a monitoring programme which is to be kept under annual review.
- (9) A risk assessment complies with this regulation where—
- (a) it meets the principles of an international standard such as EN 15975-2;
 - (b) it is subject to a system of quality control to be checked from time to time by a suitably accredited body; and
 - (b) it takes into account the results of monitoring programmes established by Article 7(1) of Directive 2000/60/EC.
- (10) In this regulation "the standard number" means the number of samples specified in Part 2 or Part 3 of Schedule 3 in respect of a parameter specified in Part 1 of that Schedule."

Amendment of regulation 11

- 8.** Omit regulation 11 (interpretation of Part 5).

Amendment of regulation 13

- 9.**—(1) Regulation 13 (sampling at treatment works) is amended as follows.
- (2) In paragraph (1), for the words “Subject” to “(6)”, substitute “Subject to paragraph (6)”.
 - (3) Omit paragraphs (2) to (4).
 - (4) In paragraph (6), for the words “the reduced number”, substitute “where a notice has been issued by the Secretary of State under regulation 9 which departs from the standard number”.
 - (5) After paragraph (6), insert—
 - “(7) In this regulation, “the standard number” has the same meaning as in regulation 9.”.

Amendment of regulation 16

- 10.**—(1) Regulation 16 (collection and analysis of samples) is amended as follows.
- (2) Omit each paragraph other than paragraph (5), this paragraph to remain in force for the sole purpose of maintaining the operability of Table A2 in Schedule 5, and to be revoked upon the revocation of Table A2.
 - (3) In paragraph (5), for the words “Subject to paragraph (7)”, substitute “Subject to regulation 16A(6)”.

New regulation 16A

- 11.**—(1) After regulation 16 insert—

“Collection and analysis of samples

16A.—(1) Every water undertaker or combined licensee must secure, so far as reasonably practicable, that in taking, handling, transporting, storing and analysing any sample required to be taken for the purposes of Part 4 or this Part, or causing any such sample to be taken, handled, transported, stored and analysed, the appropriate requirements are satisfied.

(2) In this regulation, “the appropriate requirements” means such of the following requirements as are applicable—

- (a) the sample is representative of the quality of the water at the time of sampling;
 - (b) the person taking a sample is subject to a system of quality control to an appropriate standard checked from time to time by a suitably accredited body;
 - (c) the sample is not contaminated when being taken;
 - (d) the sample is kept at such a temperature and in such conditions as secure that there is no material alteration of the concentration or value for the measurement or observation of which the sample is intended;
 - (e) the sample is analysed as soon as reasonably practicable after it has been taken—
 - (i) by or under the supervision of a person who is competent to perform that task,; and
 - (ii) with the use of such equipment as is suitable for the purpose;
 - (f) the collection and transportation of samples, or measurements recorded by continuous monitoring shall be subject to a system of quality control to an appropriate standard checked from time to time by a suitably accredited body.
- (3) Additionally, any person involved in seeking to discharge the obligation described in paragraph (1) must ensure that —
- (a) the methods of analysis used by that person for the purposes of monitoring and demonstrating compliance with this Part are validated and documented in accordance with EN ISO/IEC 17025 [or other equivalent standards accepted at international level]; and

(b) that person applies quality management system practices in accordance with EN ISO/IEC 17025 [or other equivalent standards accepted at international level].

(4) Paragraph (2)(e), includes a person who undertakes the analysis of samples for the purposes of Part 4 or this Part, whether at the time and place at which the samples are taken or otherwise.

(5) Every water undertaker or combined licensee must maintain such records as are sufficient to enable it to establish, in relation to each sample taken for the purposes of Part 4 or this Part, that such of the appropriate requirements as are applicable to that sample have been satisfied.

(6) Subject to paragraph (7), for the purpose of establishing, within acceptable limits of deviation and detection, whether the sample contains concentrations or values which contravene the prescribed concentrations or values, or exceed the specifications for indicator parameters—

- (a) the method of analysis specified in column 2 of Table A1 in Schedule 5 must be used for the parameter specified in relation to that method in column 1;
- (b) the method of analysis in respect of the parameters listed in column 1 of Table A3 in Schedule 5 must, as a minimum be capable of measuring concentrations equal to the parametric value with a limit of qualification of 30% or less of the relevant parametric value and an uncertainty of measurement as specified in column 2 of Table A. The result must be expressed using at least the same number of significant figures as for the parametric value is quoted and in the same regulatory units in the regulations;
- (c) the method of analysis used for determining compliance with the hydrogen ion parameter (item 7 in Schedule 2) must be capable, at the time of use, of measuring concentrations equal to the parametric value with a trueness of 0.2 pH unit and a precision of 0.2 pH unit; and
- (d) the method of analysis used for the odour and taste parameters (items 5 and 7 in Part II of Table B in Schedule 1) must be capable, at the time of use, of measuring values equal to the parametric value with a precision of 1 dilution number at 25°C.

(7) The Secretary of State may, on the application of any person, authorise a method of analysis other than that specified in paragraph (6)(a) (“the prescribed method”).

(8) An application for the purposes of paragraph (7) must be made in writing and must be accompanied by—

- (a) a description of the method of analysis, and
- (b) the results of the tests carried out to demonstrate the reliability of that method and its equivalence to the prescribed method.

(9) But the Secretary of State must not authorise the use of the method proposed in the application unless the Secretary of State is satisfied that the results obtained by the use of that method are at least as reliable as those produced by the use of the prescribed method.

(10) An authorisation under paragraph (7) may be subject to such conditions as the Secretary of State considers appropriate.

(11) The Secretary of State may at any time, by notice in writing served on the water undertaker or combined licensee to which an authorisation under paragraph (7) has been given, revoke the authorisation, but any such notice must be served no later than 3 months before the date on which the revocation is stated to take effect.”.

Amendment of regulation 34

12. In regulation 34, after paragraph (2)(c) insert –

“(ca) particulars of all consumer contact in relation to the discharge of duties under these Regulations.”.

Substitution of Schedule 3

13. For Schedule 3, substitute—

“SCHEDULE 3

Regulation 6

Monitoring

PART 1

Group A and Group B Parameters

Table 1

Group A parameters and circumstances for monitoring

<i>Item number (1)</i>	<i>Parameter (2)</i>	<i>Circumstances (3)</i>
1	Aluminium	When used as flocculant or where the water originates from, or is influenced by, surface waters
2	Ammonium	When chloramination is practised
3	Coliform bacteria	In all circumstances
4	Colony counts 22 ° C	In all circumstances
5	Colour	In all circumstances
6	Conductivity(1)	In all circumstances
7	<i>E. coli</i>	In all circumstances
8	Hydrogen ion	In all circumstances
9	Iron	When used as flocculant or where the water originates from, or is influenced by, surface waters
10	Manganese	Where the water originates from, or is influenced by, surface waters
11	Nitrate	When chloramination is practised
12	Nitrite	When chloramination is practised
13	Odour	In all circumstances
14	Residual disinfectant	In all circumstances
15	Taste	In all circumstances
16	Turbidity	In all circumstances

Notes:

(1) Sampling for this parameter in water supply zones may be substituted by sampling at supply points.

Table 2

Group B1 parameters and circumstances for monitoring to be used for sampling in water supply zones (or supply points)

<i>Item number</i>	<i>Parameter (2)</i>	<i>Circumstances</i>
1	Aluminium	When— (i) not used as a flocculant; (ii) the water neither originates from, nor is

2	Ammonium	influenced by, surface waters. When chloramination is not practised
3	Antimony	
4	Arsenic	
5	Benzene (1)	
6	Benzo(a)pyrene	
7	Boron (1)	
8	Bromate (2)	
9	Cadmium	
10	Chloride (1)	
11	Chromium	
12	<i>Clostridium perfringens</i> (including spores)	
13	Copper	
15	Cyanide (1)	
16	1, 2 dichloroethane (1)	
17	Enterococci	
18	Fluoride (1)	
19	Gross alpha (1) (3) (4)	
20	Gross beta (1) (3) (4)	
21	Iron	When— (i) not used as a flocculant; (ii) the water neither originates from, nor is influenced by, surface waters.
22	Lead	
23	Manganese	Where the water neither originates from, nor is influenced by, surface waters.
24	Mercury (1)	
25	Nickel	
26	Nitrate	When chloramination is not practised.
27	Nitrite	When chloramination is not practised.
28	Pesticides and related products (1)	
29	Polycyclic aromatic hydrocarbon	
30	Radon (1) (4)	
31	Selenium	
32	Sodium	
33	Sulphate (1)	
34	Tetrachloroethene (1)	
35	Tetrachloromethane (1)	
	Total organic carbon (1)	
36	Trichloroethane	
	Trihalomethanes: Total	
37	Tritium (1) (4)	

Notes:

(1) Sampling for these parameters may be within water supply zones (Group B1) or at supply points (Group B2).

(2) Monitoring of this parameter in water supply zones is required only where sodium hypochlorite is added after water has left the treatment works. In other circumstances, monitoring is required at supply points, see Group B2.

(3) To monitor for indicative dose.

(4) In the event that a single sample is taken in a year, a further sample should be taken if there is any change in relation to that supply that could affect the concentration of radionuclides in the water supply.

Table 3

Group B2 parameters and circumstances for monitoring to be used for sampling at works or supply points

<i>Item number</i>	<i>Parameter (2)</i>	<i>Circumstances</i>
1	Benzene (1)	
2	Boron (1)	
3	Bromate (2)	
4	Chloride (1)	
5	<i>Clostridium perfringens</i> (including spores)	
6	Cyanide (1)	
7	1, 2 dichloroethane (1)	
8	Fluoride (1)	
9	Gross alpha (1) (3) (4)	
10	Gross beta (1) (3) (4)	
11	Indicative dose	
12	Mercury (1)	
13	Nitrite	When chloramination is not practised.
14	Pesticides and related products (1)	
15	Radon (1) (4)	
16	Sulphate (1)	
17	Tetrachloroethene (1)	
18	Tetrachloromethane (1)	
19	Total organic carbon (1)	
20	Trichloroethane	
21	Tritium (1) (4)	

Notes:

(1) Sampling for these parameters may be within water supply zones (Group B1) or at supply points (Group B2).

(2) Monitoring is required at supply points where sodium hypochlorite is not added after water has left the treatment works, see Group B1.

(3) To monitor for indicative dose.

(4) In the event that a single sample is taken in a year, a further sample should be taken if there is any change in relation to that supply that could affect the concentration of radionuclides in the water supply.

Table 4

Group A1 parameters

<i>Item number</i>	<i>Parameter</i>
1	E. coli
2	Coliform bacteria
3	Residual disinfectant

Table 5
Group A2 parameters

<i>Item number</i>	<i>Parameter</i>
1	E.coli
2	Coliform bacteria
3	Colony counts
4	Nitrite
5	Residual Disinfectant
6	Turbidity

Table 6
Group A3 parameters

<i>Item number</i>	<i>Parameter</i>
1	Conductivity

Table 7
Group A4 parameters

<i>Item number</i>	<i>Parameter</i>
1	Aluminium
2	Ammonium
3	Colony counts 22° C
4	Colour
5	Conductivity
6	Hydrogen ion
7	Iron
8	Manganese
9	Nitrate
10	Nitrite
11	Odour
12	Taste
13	Turbidity

PART 2

Annual sampling frequencies: water supply zones

Table 8

Annual sampling frequencies for Group A4 parameters: water supply zones

Note: (1) This table and each table which follows it in this Part set out the annual sampling frequencies for all the substances and parameters comprising each of the groups to which they correspond, those groups having been outlined in Part 1 of this Schedule. These are determined for each water supply zone according to its estimated population (as specified in column one of each table in this Part). The number of samples to be taken is the standard number specified in column 2, unless a notice varying this number has been issued under regulation 9.

(2) For the purposes of table 10, where the population is not an exact multiple of 5,000, the population figure must be rounded up to the nearest multiple of 5,000.

<i>Estimated population of water supply zone</i>	<i>Standard sampling frequency per year</i>
<100	2
100-4,999	4
5,000—9,999	12
10,000-29,999	24
30,000-49,999	36
50,000-79,999	52
80,000-100,000	76

Table 9

Annual Sampling frequencies for Group B1 parameters: water supply zones

<i>Estimated population of water supply zone</i>	<i>Standard sampling frequency per year</i>
<100	1
100-4,999	4
5,000-100,000	8

Table 10

Annual Sampling frequencies for Group A1: water supply zones

<i>Estimated population of water supply zone</i>	<i>Standard sampling frequency per year</i>
<100	4
≥	12 per 5,000 population

PART 3

Annual sampling frequencies: treatment works or supply points

Table 11

Annual sampling frequencies for Group A2 parameters: treatment works or supply points

Note: This table and each table which follows it in this Part set out the annual sampling frequencies for all the substances and parameters comprising each of the groups to which they correspond at treatment works or supply points, those groups having been outlined in

Part 1 of this Schedule. The frequencies are determined according to the volume of water supplied at each treatment works or supply point. The number of samples to be taken is the standard number specified in column 2, unless a notice varying this number has been issued under regulation 9.

<i>Volume of water supplied m³/day</i>	<i>Standard sampling frequency per year</i>
<20	4
20-1,999	52
2,000-5,999	104
6,000-11,999	208
≥12,000	365

Table 12

Annual sampling frequencies for Group A3 parameters: treatment works or supply points

<i>Volume of water supplied m³/day</i>	<i>Standard sampling frequency per year</i>
<20	2
20-999	4
1,000-1999	12
2,000-5,999	24
6,000-9,999	36
10,000-15,999	52
16,000-32,999	104
33,000-49,999	156
50,000-67,999	208
68,000-84,999	260
85,000-101,999	312
102,000-119,999	365
120,000-241,999	730
242,000-484,999	1,460
485,000-728,999	2,190

Table 13

Annual sampling frequencies for Group B2 parameters: treatment works or supply points

<i>Volume of water supplied m³/day</i>	<i>Standard sampling frequency per year</i>
<20	1
20-999	4
1,000-49,999	8
50,000-89,999	12
90,000-299,999	24
300,000-649,999	36
≥650,000	48

Amendment of Schedule 5

13—(1) Schedule 5 is amended as follows.

(2) For Table A1, substitute –

“Table A1

Microbiological parameters for which, subject to regulation 16A(7), methods of analysis are specified

<i>Parameter (1)</i>	<i>Method of analysis (2)</i>
E. coli and coliform bacteria	EN ISO 9308-1 or EN ISO 9380-2
Enterococci	EN ISO 7899-2
Pseudomonas aeruginosa	EN ISO 16266
Enumeration of culturable microorganisms – colony count 22°C	EN ISO 6222
Enumeration of culturable microorganisms – colony count 36°C	EN ISO 6222
Clostridium perfringens including spores	EN ISO 14189”.

(3) Under the heading of Table A2, insert—

“Note:

“Trueness” is a measure of systematic error, i.e. the difference between the mean value of the large number of repeated measurements and the true value. Further specifications are those set out in ISO 5725.

“Precision” is a measure of random error and is usually expressed as the standard deviation (within and between batches) of the spread of results from the mean. Acceptable precision is twice the relative standard deviation. This term is further specified in ISO 5725.

“Limit of detection” is either:

(a) three times the standard deviation within a batch of a natural sample containing a low concentration of the parameter; or

(b) five times the standard deviation of a blank sample (within a batch).”.

(4) In Table A2—

(a) in the relevant place insert—

“Hydrogen ion concentration pH (expressed in pH units)	0.2	0.2”.
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(b) in the entry in column (4) (limit of detection) which relates to the entry in column (1) in respect of 1,2-dichloroethane, for “25”, substitute “10”.

(5) At the end, add—

“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>Parameters</i>	<i>Uncertainty of measurement % of the parametric value (except for pH) (see note 1)</i>
Aluminium	25
Ammonium	40
Antimony	40
Arsenic	30

Benzene	40
Benzo(a)pyrene (see note 2)	50
Boron	25
Bromate	40
Cadmium	25
Chloride	15
Chromium	30
Colour	20
Conductivity	20
Copper	25
Cyanide (see note 3)	30
1,2-dichloroethane	40
Fluoride	20
Hydrogen ion concentration pH (expressed in pH units) (see note 4)	0.2
Iron	30
Lead	25
Manganese	30
Mercury	30
Nickel	25
Nitrate	15
Nitrite	20
Oxidisability (see note 5)	50
Pesticides (see note 6)	30
Polycyclic aromatic hydrocarbons (see note 7)	50
Selenium	40
Sodium	15
Sulphate	15
Tetrachloroethene (see note 8)	30
Tetrachloromethane	30
Trichloroethene (see note 8)	40
Trihalomethanes: total (see note 7)	40
Total organic carbon (see note 9)	30
Turbidity (see note 10)	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 the percentage of the parametric value stated in the table or better. Measurement uncertainty shall be estimated at the level of the parametric value, unless otherwise specified.
- (2) If the value of uncertainty of measurement cannot be met, the best available technique should be selected (up to 60 %).
- (3) The method determines total cyanide in all forms.
- (4) Values uncertainty of measurement are expressed in pH units.
- (5) Reference method: EN ISO 8467.
- (6) 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.
- (7) The performance characteristics apply to individual substances, specified at 25 % of the parametric value in Part I of Table B in Schedule 1.

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

(9) The uncertainty of measurement should be estimated at the level of 3 mg/l of the total organic carbon (TOC). CEN 1484 Guidelines for the determination of TOC and dissolved organic carbon (DOC) shall be used.

(10) The uncertainty of measurement should be estimated at the level of 1,0 NTU (nephelometric turbidity units) in accordance with EN ISO 7027.”.

Transitional provision

14.—(1) Any variation from the standard number under the 2016 Regulations as in force immediately before the coming into force of these Regulations is to cease upon these Regulations coming into force.

(2) Table A2 (Parameters in relation to which methods of analysis must satisfy prescribed characteristics) in Schedule 5 to the 2016 Regulations remains in force until 23:59 on 31st December 2019 following which it is revoked for all purposes, but pending its revocation, a water undertaker may continue to use that table, or instead begin using Table A3 (Minimum performance characteristic “Uncertainty of measurement”).

	<i>Name</i>
	Parliamentary Under Secretary of State
Date	Department for Environment, Food and Rural Affairs.

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations amend the Water Supply (Water Quality) Regulations 2016 (S.I 2016/614). The amendments principally implement the requirements of Commission Directive (EU) 2015/1787 which amended the Drinking Water Directive (Council Directive 98/83/EC). The purpose of those amendments is to align the principles applying in the EU in respect of risk based sampling and analysis of drinking water with those of the World Health Organisation.

The Regulations in particular update the requirements for monitoring programmes put in place by suppliers of drinking water, which set minimum sampling frequencies in respect of particular parameters in water intended for human consumption. The Regulations also introduce a new risk assessment approach. Where the criteria of that approach are met, suppliers of drinking water are permitted to reduce the frequencies for the sampling and analysis of water. Additionally, the Regulations also provide the specifications for the methods of analysis of certain parameters and performance characteristics of all parameters.

An impact assessment has been prepared in respect of these Regulations.