

2017 No.

WATER, ENGLAND

**The Private Water Supplies (England) (Amendment)
Regulations 2017**

Made - - - - - ***

Coming into force - - - - - 27th October 2017

The Secretary of State makes these Regulations in exercise of the powers conferred by—

- (a) sections 67, 77(3) and (4) and 213(2) of the Water Industry Act 1991(a); and
- (b) section 2(2) of the European Communities Act 1972(b).

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(c).

The Secretary of State has carried out the public consultation required by Article 9 of Regulation (EC) No 178/2002 of the European Parliament and of the Council laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety(d).

Citation, commencement and application

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

Interpretation

2. In these Regulations “the 2016 Regulations” means the Private Water Supplies (England) Regulations 2016(e).

Amendment of Regulation 2 of the 2016 regulations

3.—(1) Regulation 2 (interpretation) of the 2016 Regulations is amended as follows.

(2) In paragraph (1), omit the definitions of “audit monitoring” and “check monitoring”.

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- (a) 1991 c.56; section 213(2) was amended by paragraph 28 of Schedule 1 to the Competition and Service (Utilities) Act 1992 (c.43) and by section 36(2) of, and paragraph 49(3) of Schedule 8 to, the Water Act 2003 (c.37). It has also been amended by paragraph 119(4) of Schedule 7 to the Water Act 2014 (c.21).
 - (b) 1972 c.68; section 2(2) was amended by section 27(1)(a) of the Legislative and Regulatory Reform Act 2006 (c.51) and by Part 1 of the Schedule to the European Union (Amendment) Act 2008 (c.7).
 - (c) S.I. 2008/301.
 - (d) OJ No L 31, 1.2.2002, p 1, as last amended by Regulation (EU) No 652/2014 (OJ No L 189, 27.6.14 p 1).
 - (e) S.I. 2016/618.

- (3) Insert in the relevant place—
““*E-coli*” means *Escherichia coli*”.

Amendment of regulation 6 of the 2016 Regulations

4.—(1) Regulation 6 (requirement to carry out a risk assessment) of the 2016 Regulations is amended as follows.

(2) After paragraph (4) insert—

“(5) A risk assessment described in paragraph (1) must—

- (a) satisfy any requirements specified by the Secretary of State in respect of the conduct of such an assessment;
- (b) satisfy the requirements of the Security of Drinking Water Supply Guidelines for Risk and Crisis Management^(a);
- (c) take into account the results from the monitoring programmes established by the second paragraph of Article 7(1) of Directive 2000/60/EC of the European Parliament and of the Council.

(6) A local authority must within 12 months of having carried out the risk assessment provide the Secretary of State with a summary of the results of that assessment.”.

Amendment of regulation 7 of the 2016 Regulations

5.—(1) Regulation 7 (monitoring) of the 2016 Regulations is amended as follows.

(2) Renumber the existing text as paragraph (1).

(3) After paragraph (1) insert—

“(2) A local authority must discharge the obligation described in paragraph (1) by establishing a monitoring programme which consists of either—

- (a) the collection and analysis of discrete water samples;
- (b) measurement recorded by a continuous monitoring process; or
- (c) a combination of both of the methods described in sub-paragraphs (a) and (b).

(3) In addition, monitoring programmes may include either or both of—

- (a) inspections of records of the functionality and maintenance status of equipment;
- (b) inspections of the catchment area, water abstraction, treatment, storage and distribution infrastructure.”.

Amendment of regulation 11 of the 2016 Regulations

6.—(1) Regulation 11 (monitoring for radioactive substances) of the 2016 Regulations is amended as follows.

(2) In paragraph (6), for “audit monitoring” until the end, substitute—

“monitoring for a Group B parameter in Table 3 in Part 2 of Schedule 2.”.

(3) After paragraph (10) insert—

“(10A) The local authority may for such time as it may decide, exclude from monitoring, or reduce the frequency of monitoring in respect of a parameter coming within paragraph 2 provided that the parameter is—

(a) EN15975-2.

- (a) naturally occurring; and
 - (b) stable.”.
- (4) In paragraph (11), after “paragraph (10)” insert or “paragraph (10A)”.
- (5) In paragraph (12),after “paragraph (10)” insert or “paragraph (10A)”.

Amendment of regulation 12 of the 2016 Regulations

7.—(1) Regulation 12 (sampling and analysis) of the 2016 Regulations is amended as follows.

- (2) After paragraph (3) insert—
- “(4) 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 any of the sampling points specified in paragraph (1) without prior flushing.
- (5) All sampling under this regulation—
- (a) for chemical parameters in the distribution network must be undertaken in accordance with ISO 5667-5, other than where the sample is taken from a consumer’s tap;
 - (b) for microbiological parameters must be undertaken in accordance with—
 - (i) EN ISO 19458, sampling purpose A in the distribution network; and
 - (ii) EN ISO 19458, sampling purpose B at the consumer’s tap.”.

Amendment of regulation 16 of the 2016 Regulations

- 8.—(1) Regulation 16 (investigations) of the 2016 Regulations is amended as follows.
- (2) In paragraph (2), for “(3) and (4)”, “substitute (3), (4) and (6) as appropriate”.
- (3) In paragraph (4)(b), for the words “within 28 days of becoming aware of the failure” substitute “within 28 days of establishing the cause”.
- (4) After paragraph (5) add—
- “(6) In any case where a local authority’s monitoring obligations in respect of a private water supply have been reduced or otherwise varied under Part 2A of Schedule 2 and—
- (a) the local authority considers there to be a significant risk that a private water supply is unwholesome; or
 - (b) the local authority determines as a matter of fact that a private water supply is unwholesome,
- any such reduction or variation must cease immediately and the standard frequencies outlined in Table 2 and Table 3 in Schedule 2 must be reinstated in respect of that supply.”.

Amendment of regulation 18 of the 2016 Regulations

- 9.—(1) Regulation 18 (notices) of the 2016 Regulations is amended as follows.
- (2) For sub-paragraph (d) of paragraph (2) substitute—
- “(d) specify what other action is necessary to—
- (i) safeguard human health;
 - (ii) restore the wholesomeness of the water supply; and
 - (iii) maintain the continued wholesomeness of the water supply following its restoration.”.
- (3) After paragraph (6) insert—

“(7) Where any relevant person who is required by virtue of a private water supply notice to take any step in relation to any premises fails to take that step within the period specified in the notice (“A”), the local authority which served the notice may take that step themselves.

(8) Where any step is taken by a local authority in relation to any premises by virtue of paragraph (7)—

- (a) the local authority may recover from A any expenses reasonably incurred by it in taking that step; and
- (b) where a person, other than the local authority is liable to make payments to A, sums paid by virtue of paragraph (a) in respect of the taking of any step shall be deemed to be expenses incurred in the taking of that step by A.”.

Amendment of Schedule 1

10. In Table C in Part 2 of Schedule 1, for—

“

Coliform bacteria	0	Number/100ml (Number/250 ml in the case of water put into bottles of containers)
Colony counts	No abnormal change	Number/ml at 22°
	No abnormal change	Number/ml at 37°C”

substitute—

“

Coliform bacteria	0	Number/100ml (Number/250 ml in the case of water put into bottles or containers)
Colony counts	No abnormal change	Number/ml at 22°C

”

Amendment of Schedule 2

11.—(1) For Parts 1 and 2 of Schedule 2 to the 2016 Regulations, substitute—

“**SCHEDULE 2**

Regulation 9

Monitoring

PART 1

Monitoring for Group A parameters

Sampling for Group A parameters

1.—(1) A local authority must monitor for a Group A parameter in accordance with this Part.

(2) “Monitoring for a group A parameter” means sampling for each parameter listed in column 1 of Table 1 in the circumstances listed in the entry which corresponds with that parameter in column 2 of Table 1 in order to—

- (a) determine whether or not the water complies with the concentrations or values in Schedule 1;

- (b) provide information on the organoleptic and microbiological quality of the water; and
- (c) establish the effectiveness of the treatment of the water, including disinfection.

Table 1

Group A parameters

<i>Parameter</i>	<i>Circumstances</i>
Aluminium	When used as flocculant or where the water originates from, or is influenced by, surface waters
Ammonium	Where chloramination is practised
Coliform bacteria	In all supplies
Colony counts 22°C	In all supplies
Colour	In all supplies
Conductivity	In all supplies
<i>E. coli</i>	In all supplies
Hydrogen Ion	In all supplies
Iron	When used as flocculant or where the water originates from, or is influenced by, surface waters
Manganese	Where the water originates from, or is influenced by, surface waters
Nitrate	When chloramination is practised
Nitrite	When chloramination is practised
Odour	In all supplies
Taste	In all supplies
Turbidity	In all supplies

Frequency of sampling for Group A parameters

2.—(1) Sampling for a Group A parameter must be undertaken at the frequencies specified in Table 2.

Table 2

Sampling frequency for Group A parameters

<i>Volume m³/day</i>	<i>Sampling frequency per year</i>
≤ 10	1
> 10 ≤ 100	2
> 100 ≤ 1,000	4
> 1,000 ≤ 2,000	10
> 2,000 ≤ 3,000	13
> 3,000 ≤ 4,000	16
> 4,000 ≤ 5,000	19
> 5,000 ≤ 6,000	22
> 6,000 ≤ 7,000	25
> 7,000 ≤ 8,000	28
> 8,000 ≤ 9,000	31
> 9,000 ≤ 10,000	34
> 10,000	4 + 3 for each 1,000m ³ /day of the total volume (rounding up to the nearest multiple of 1,000m ³ /day)

PART 2

Monitoring for Group B Parameters

Sampling for Group B parameters

3.—(1) A local authority must monitor for a Group B parameter in accordance with this Part.

(2) “Monitoring for a Group B parameter” means sampling for each parameter listed in Parts 1 and 2 of Schedule 1 (other than Group A parameters already being sampled under Part 1 of this Schedule)—

- (a) in order to provide information necessary to determine whether or not the private water supply satisfies each concentration, value or state prescribed in those Parts of that Schedule; and
- (b) if disinfection is used, in order to check that disinfection by-products are kept as low as possible without compromising the effectiveness of disinfection.

Frequency of sampling for Group B parameters

4.—(1) Sampling for a Group B parameter must be undertaken at the frequencies specified in Table 3.

Table 3

Sampling frequencies for a Group B parameter

<i>Volume m³/day</i>	<i>Sampling frequency per year</i>
≤ 10	1
> 10 ≤ 3,300	2
> 3,300 ≤ 6,600	3
> 6,600 ≤ 10,000	4
> 10,000 ≤ 100,000	3 + 1 for each 10,000m ³ /day of the total volume (rounding up to the nearest multiple of 10,000m ³ /day)
> 100,000	10 + 1 for each 25,000m ³ /day of the total volume (rounding up to the nearest multiple of 25,000m ³ /day)

PART 2A

Variation of monitoring for Group A and Group B Parameters

Variation of monitoring requirements

5.—(1) A local authority may reduce the sampling frequency in respect of any parameter in Group A or Group B other than *E.coli* provided that—

- (a) the results from samples taken in respect of that parameter collected at regular intervals over the preceding three years are all at less than 60% of the parametric value;

- (b) the results of a risk assessment described in regulation 6(1) 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) data collected in the course of discharging its monitoring obligations under this Part are taken into account; and
 - (d) at least one sample is taken per year.
- (2) A local authority may cease to monitor a parameter other than *E.coli* provided that—
- (a) the results from samples taken in respect of that parameter collected at regular intervals over the preceding three years must all be at less than 30% of the parametric value;
 - (b) the results of a risk assessment described in regulation 6(1) 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) data collected in the course of discharging its monitoring obligations under this Part are taken into account.
- (3) A local authority may set a higher frequency for any parameter if it considers it appropriate, taking into account the findings of any risk assessment, and may monitor anything else identified in the risk assessment.”.
- (2) Part 3 of Schedule 2 of the 2016 Regulations is amended as follows.
- (3) For the heading to Part 3, substitute “Minimum frequency for monitoring Group A and Group B parameters for water put into bottles or containers not intended for sale”.
- (4) In the header to the table in Part 3—
- (a) for “Check monitoring number of samples per year”, substitute “Number of samples to be taken per year when monitoring for a Group A parameter”; and
 - (b) for “Audit monitoring number of samples per year”, substitute “Number of samples to be taken per year when monitoring for a Group B parameter”.

Amendment of Schedule 3

12. In Schedule 3 (sampling and analysis)—

- (a) for paragraph 1 substitute—

“1.—(1) Every local authority must secure, so far as reasonably practicable, that—

- (a) in taking, handling, transporting, storing; and
- (b) analysing,

any sample required to be taken for the purposes of this Schedule, or causing any such sample to be taken, handled, transported, stored or analysed, the appropriate requirements are satisfied.

(2) In this paragraph, “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 must be subject to a system of quality control to an appropriate standard checked from time to time by a suitably accredited body.
- (3) Additionally, where undertaking the activity described in—
- (a) paragraph (1)(a), the local authority must demonstrate compliance with any of EN ISO/IEC 17024, EN ISO/IEC 17025 or another equivalent standard accepted at international level;
 - (b) paragraph (1)(b), the local authority must demonstrate compliance with EN ISO/IEC 17025 or another equivalent standard accepted at international level.
- (4) But implementation of the requirement described in sub-paragraph (3)(a) may be delayed for a period of no more than 24 months beginning with the day on which these Regulations come into force.
- (5) A person referred to in paragraph (2)(e) includes a person who undertakes the analysis of samples for the purposes of this Schedule, whether at the time and place at which the samples are taken or otherwise.
- (6) In this paragraph, “suitably accredited body” means any person accredited by the United Kingdom Accreditation Service(a); ”
- (b) for paragraph 2(6) substitute—
- “(6) For these purposes—
- (a) “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;
 - (b) “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;
 - (c) “limit of detection” is either—
 - (i) three times the standard deviation within a batch of a natural sample containing a low concentration of the parameter; or
 - (ii) five times the standard deviation of a blank sample (within a batch).”;
- (c) in Table 1 (prescribed method of analysis)—
- (i) for the words describing the method in respect of *Clostridium perfringens* (including spores), substitute “EN ISO 14189”;
 - (ii) for the words describing the method for *Pseudomonas aeruginosa*, substitute “EN ISO 16266”; and
 - (iii) omit the table headed “*Use the following method to make m-CP agar.”;
- (d) in Table 2, in the relevant place insert—

“Hydrogen ion	0.2	0.2”.	
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(a) See S.I. 2009/3155 as to the establishment of the United Kingdom Accreditation Service.

concentration pH (expressed in pH units)			
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(e) after Table 2 insert—

“Note: For the parameters set out in Table 3, the specified performance characteristics are that the method of analysis used must, as a minimum, be capable of measuring concentrations equal to the parametric value with a limit of quantification, as defined in Article 2(2) of Commission Directive 2009/90/EC, of 30 % or less of the relevant parametric value and an uncertainty of measurement as specified in Table 3. 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 laid down in these Regulations.

The uncertainty of measurement laid down in Table 3 must not be used as an additional tolerance to the parametric values set out in Schedule 1.

Table 3

Minimum performance characteristic “Uncertainty of measurement”

<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
Trichloroethene (see note 8)	40
Tetrachloromethane	30
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 1 of Table B in Part 1 of Schedule 1.

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

Amendment of Schedule 4

13.—(1) Schedule 4 (records) is amended as follows.

(2) In paragraph 2(1) after paragraph (j) insert—

“(k) a summary of any risk assessment;

(l) a summary of the reasons for a decision to reduce or exempt altogether the monitoring of a particular parameter under regulation 11(10) and 11(10A).”

Amendment of Schedule 5

14.—(1) Schedule 5 (fees) is amended as follows.

(2) In paragraph 1, omit “subject to the following maximum amounts”.

(3) In the column headed “Service” in the table, substitute –

(i) “check monitoring” with “monitoring of Group A parameters”; and

- (ii) “audit monitoring and monitoring under regulation 11” with “monitoring of Group B parameters and monitoring under regulation 11”.

(4) In the table, omit the column headed “Maximum fee (£)”.

Transitional provisions

15.—(1) Any local authority which has—

- (a) reduced the frequency of sampling for a parameter under paragraph 2(2) of Schedule 2 (monitoring) to the 2016 Regulations; or
- (b) excluded a parameter from audit monitoring under paragraph 3(3) of Schedule 2 to the 2016 Regulations,

must upon the coming into force of these Regulations bring any such reduction or exclusion to an end, and instead begin to monitor in accordance with the provision made in Schedule 2 to these Regulations.

(2) But a local authority may rely upon any data collected in the 36 month period ending with the day on which these Regulations come into force to justify any variation in monitoring under Part 2A of Schedule 2 (as inserted by these Regulations into the 2016 Regulations).

(3) Table 2 (prescribed performance characteristics for methods of analysis) in Schedule 3 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 local authority may continue to use that table, or instead begin using Table 3 (uncertainty of measurement) inserted into Schedule 3 by regulation 12(3) of these Regulations from the date the Regulations come into force.

Signatory text

Address
Date

Name
Parliamentary Under Secretary of State
Department

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations amend the Private Water Supplies (England) Regulations 2016 (S.I 2016/618). 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 local authorities to monitor private water supplies of drinking water. The programmes 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, local authorities 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.