STATUTORY INSTRUMENTS

2018 No. 707

The Private Water Supplies (England) (Amendment) Regulations 2018

Amendment of the 2016 Regulations

2.—(1) The 2016 Regulations are amended as follows.

- (2) In regulation 2 (interpretation) in paragraph (1)—
 - (a) omit the definitions of "audit monitoring" and "check monitoring";
 - (b) after the definition of "disinfection" insert-

""E. coli" means *Escherichia coli; ";*

- (c) in the definition of "prescribed concentration or value" for the words from "the Tables" to the end substitute "Table A or in Table B in Schedule, 1 as measured by reference to the unit of measurement so specified and as read, where appropriate in the case of Table B, with the notes to that Table;".
- (3) In regulation 6 (requirement to carry out a risk assessment) 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 European standard EN 15975-2 entitled "Security of Drinking Water Supply - Guidelines for Risk and Crisis Management – Risk Management"(1); and
- (c) take into account the results of monitoring conducted under the second paragraph of Article 7(1) and Article 8 of Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy(2).

(6) A local authority must within 12 months beginning with the day after the day on which it carried out the risk assessment provide the Secretary of State with a summary of the results of that assessment.".

- (4) In regulation 7 (monitoring)—
 - (a) renumber the existing text as paragraph (1);
 - (b) 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 or both of the following—

- (a) collection and analysis of discrete water samples;
- (b) measurements recorded by a continuous monitoring process.
- (3) Monitoring programmes may in addition consist of either or both of the following-

⁽¹⁾ This standard was approved by the European Committee for Standardization (CEN) on 5th July 2013. Under reference BS EN 15975-2, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 84737 0).

⁽²⁾ OJ L 327, 22.12.2000, p.1, last amended by Commission Directive 2014/101/EU (OJ L 311, 31.10.2014, p.32).

- (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.".
- (5) In regulation 11 (monitoring for radioactive substances)—
 - (a) in paragraph (6) for "audit monitoring" substitute "monitoring for a Group B parameter";
 - (b) after paragraph (10) insert—

"(10A) The local authority may exclude the indicative dose parameter from monitoring, or reduce the frequency of monitoring in respect of that parameter, for such period as it may decide provided that the parameter is—

- (a) naturally occurring, and
- (b) stable.";
- (c) in each of paragraphs (11) and (12) after "paragraph (10)" insert "or (10A)".
- (6) In regulation 12 (sampling and analysis) after paragraph (3) insert—

"(4) Compliance samples for chemical parameters including copper, lead and nickel must take the form of a random daytime sample of one litre volume taken at a consumer's tap without prior flushing.

- (5) All sampling under this regulation—
 - (a) for chemical parameters in the distribution network must, other than where the sample is taken at a consumer's tap, be undertaken in accordance with international standard ISO 5667-5 entitled "Water quality. Sampling. Guidance on treatment of drinking water from treatment works and piped distribution systems"(3);
 - (b) for microbiological parameters in the distribution network and at a consumer's tap must be undertaken in accordance with European standard EN ISO 19458 entitled "Water Quality – Sampling for microbiological analysis"(4) using sampling procedure A in the distribution network and sampling procedure B at a consumer's tap.".
- (7) In regulation 16 (investigations)—
 - (a) in paragraph (2) for "(3) and (4)" substitute "(3), (4) and (6) as appropriate";
 - (b) in paragraph (4)(b) for "becoming aware of the failure" substitute "establishing the cause";
 - (c) after paragraph (5) insert—

"(6) In any case where the monitoring obligations in respect of a private water supply have been reduced or otherwise varied under Part 2A of Schedule 2 by a local authority 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,

the reduction or variation in respect of the parameter which has contributed to the risk or fact of unwholesomeness must cease immediately and the standard frequency outlined

⁽³⁾ This standard was approved by the International Organization for Standardization (ISO) on 15th April 2006. Under reference BS ISO 5667-5:2006 it is published as a UK standard by the British Standards Institution (ISBN 0 580 47140 3).

⁽⁴⁾ This standard was approved by the European Committee for Standardization (CEN) on 1st July 2006. Under reference BS EN ISO 19458:2006, it is published as a UK standard by the British Standards Institution (ISBN 0 5804 49136 6).

in Table 2 or Table 3 in Schedule 2 (as applicable) must be reinstated in respect of that parameter.".

- (8) In regulation 18 (notices)—
 - (a) for paragraph (2)(d) substitute—
 - "(d) specify what corrective action must be taken in order 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.";
 - (b) after paragraph (6) insert—

"(7) Where any relevant person ("P") who is required by virtue of a notice served under this regulation to take any step in relation to any premises fails to take that step within the period specified in the notice, the local authority which served the notice may take that step itself.

(8) Where any step is taken by a local authority in relation to any premises by virtue of paragraph (7), the local authority may recover from P any expenses reasonably incurred by it, or by any person acting on its behalf, in taking that step.".

- (9) In Schedule 1 (prescribed concentrations or values)—
 - (a) in Part 1 (wholesomeness) in Table A (microbiological parameters: prescribed concentrations or values)—
 - (i) omit the row commencing "Colony Count 37°C";

(ii) for "Escherichia coli (E coli)", in both places where it appears, substitute "E. coli";

- (b) in Part 2 (indicator parameters excluding radioactive substances: prescribed concentrations, values or states)—
 - (i) in respect of the entry for Coliform bacteria in the first column—
 - (aa) omit "No abnormal change" in the corresponding entry in the second column; and
 - (bb) omit "Number/ml at 22°" in the corresponding entry in the third column;
 - (ii) in respect of the entry for Colony counts in the first column for "37°C" in the corresponding entry in the third column substitute "22°C".
- (10) In Schedule 2 (monitoring)—
 - (a) for Parts 1 and 2 (check monitoring and audit monitoring) substitute—

"PART 1

Monitoring for Group A parameters

Monitoring for Group A parameters

1.—(1) A local authority must monitor for a Group A parameter in accordance with this Part and Part 2A.

(2) In this Schedule, "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

Parameter	Circumstances
Aluminium	Where used as a water treatment chemical 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
E. coli	In all supplies
Hydrogen ion	In all supplies
Iron	Where used as a water treatment chemical 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	Where chloramination is practised
Nitrite	Where chloramination is practised
Odour	In all supplies
Taste	In all supplies
Turbidity	In all supplies

Group A parameters

Frequency of sampling for Group A parameters

2. Monitoring for a Group A parameter must be undertaken at the frequencies specified in Table 2.

Table 2

Sampling frequency for Group A parameters

Volume m³/day	Sampling frequency per year
≤ 10	1

Volume m ³ /day	Sampling frequency per year
> 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

Monitoring for Group B parameters

3.—(1) A local authority must monitor for a Group B parameter in accordance with this Part and Part 2A.

(2) In this Schedule, "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. Monitoring for a Group B parameter must be undertaken at the frequencies specified in Table 3.

Table 3

Sampling frequencies for a Group B parameter

Volume m ³ /day	Sampling frequency per year
≤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	12 + 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) When monitoring for a Group A or Group B parameter, 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 a period of at least 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 for a Group A or Group B parameter other than *E. coli* provided that—

- (a) the results from samples taken in respect of that parameter collected at regular intervals over a period of at least three years are all 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; and
- (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.";

(b) in Part 3—

- (i) in the heading for "Check Monitoring and Audit Monitoring" substitute "Monitoring Group A and Group B Parameters";
- (ii) in the table-
 - (aa) 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
 - (bb) for "Audit monitoring number of samples per year" substitute "Number of samples to be taken per year when monitoring for a Group B parameter".
- (11) In Schedule 3 (sampling and analysis)—
 - (a) in Part 1 (general), for paragraph 1 (samples: general) substitute—

"Samples: general

1.—(1) A local authority must secure, so far as reasonably practicable, that when it takes, handles, transports, stores or analyses any sample required to be taken for the purposes of this Schedule, or causes any such sample to be taken, handled, transported, stored or analysed, it complies with the appropriate requirements.

(2) A local authority must secure that a person accredited by the United Kingdom Accreditation Service(5) checks from time to time the local authority's compliance with the appropriate requirements.

(3) Additionally, when undertaking activity described in sub-paragraph (1) the local authority must demonstrate compliance with the following standards—

- (a) as regards any such activity, other than analysing samples, on or after 11th July 2020, European standard EN ISO/IEC 17024 entitled "Conformity Assessment. General requirements for bodies operating certification of persons"(6), European standard EN ISO/IEC 17025 entitled "General requirements for the competence of testing and calibration laboratories"(7) or other equivalent standards accepted at international level;
- (b) as regards the activity of analysing samples, European standard EN ISO/IEC 17025 or another equivalent standard accepted at international level.

(4) In this paragraph, "appropriate requirements" means such of the following as are applicable—

- (a) the sample is representative of the quality of the water at the time of sampling;
- (b) the person taking the sample is doing so in accordance with a system of quality control to an appropriate standard;
- (c) the sample is not contaminated in the course of being taken;

⁽⁵⁾ See S.I. 2009/3155 as to the establishment of the United Kingdom Accreditation Service.

 ⁽⁶⁾ This standard was approved by the European Committee for Standardization (CEN) on 2nd June 2012. Under reference BS EN ISO/IEC 17024:2012, it is published as a UK standard by the British Standards Institution (ISBN 0 978 0580 78463 7).
(7) This standard was approved by the European Committee for Standardization (CEN) on 10th November 2017. Under reference

- (d) the sample is kept at such a temperature and in such conditions as will 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 whether at the time and place it is taken or as soon as reasonably practicable after it is taken—
 - (i) by or under the supervision of a person who is competent to perform that task, and
 - (i) with the use of such equipment as is suitable for the purpose.";
- (b) in Part 1 (general) in paragraph 2 (analysing samples)—

(i) omit sub-paragraphs (3) and (4);

- (ii) in sub-paragraph (5), after "precision" insert "or uncertainty of measurement";
- (iii) for sub-paragraph (6) substitute—

"(6) For the parameters set out in Table 3 in Part 2 of this Schedule, the specified performance characteristics are that the method of analysis used must 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 laying down technical specifications for chemical analysis and monitoring of water status(8), of 30% or less of the relevant parametric value and an uncertainty of measurement as specified in that Table.

(7) The result must be expressed using at least the same number of significant figures as for the parametric value quoted and in the same units laid down in these Regulations.

(8) The uncertainty of measurement laid down in Table 3 in Part 2 of this Schedule must not be used as an additional tolerance to the parametric values set out in Schedule 1.";

- (c) in Part 2 (analytical methods) in Table 1 (prescribed methods of analysis)—
 - (i) for the words describing the method in respect of Clostridium perfringens (including spores) substitute "BS-EN ISO 14189"(9);
 - (ii) for "Escherichia coli (E coli)" substitute "E. coli";
 - (iii) for the words describing the method in respect of *Pseudomonas aeruginosa*, substitute "BS-EN ISO 16266"(**10**);
- (d) after Table 1 in Part 2-
 - (i) omit the table headed "*Use the following method to make m-CP agar:";
 - (ii) omit Table 2;
- (e) at the end of Part 2 insert—

⁽⁸⁾ OJ L 201, 1.8.2009, p.36.

 ⁽⁹⁾ This standard was approved by the European Committee for Standardization (CEN) on 15th 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).
(10) This standard was approved by the European Committee for Standardization (CEN) on 11th 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).

"Table 3

Minimum performance characteristic: uncertainty of measurement

Parameters	Uncertainty of measurement % of the parametric value (except for pH) ⁽¹⁾
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

Parameters	Uncertainty of measurement % of the parametric value (except for pH) ⁽¹⁾
Sodium	15
Sulphate	15
Tetracloroethene ⁽⁷⁾	30
Tetracloromethane	30
Trichloroethene ⁽⁷⁾	40
Trihalomethanes: total ⁽⁶⁾	40
Total organic carbon ⁽⁸⁾	30
Turbidity ⁽⁹⁾	30";

- (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 must be estimated at the level of the parametric value.
- (2) If the value of uncertainty of measurement cannot be met, the best available technique must be selected (up to 60% of the parametric value).
- (3) The method determines total cyanide in all forms.
- (4) Reference method: European standard EN ISO 8467 entitled "Water quality Determination of permanganate index (ISO 8467:1993)11.
- (5) 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.
- (6) 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.
- (7) 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.
- (8) 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*"12 and dissolved organic carbon (DOC) must be used.
- (9) The uncertainty of measurement must be estimated at the level of 1.0 nephelometric turbidity units (NTU) in accordance with European standard EN ISO 7027-1 entitled "*Water quality Determination of turbidity Part 1: Quantitative methods (ISO 7027-1:2016*"13.
 - (f) in paragraph 8(1)(a) in Part 3 (monitoring for indicative dose and analytical performance characteristics), for the words from "laid down" to the end substitute—
 - "referred to as "standard values and relationships" in Article 13, and recommended for the estimation of doses from internal exposure in the definition of "standard values and relationships" in Article 4(96), of Council Directive 2013/59/Euratom laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation(14), or".
- (12) In Schedule 4 (records) in paragraph 2(1) (additional records) 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 (10A).".

⁽¹⁴⁾ OJ No L 13, 17.1.2014, p.1. For the estimation of doses from internal exposure, Article 4(96) refers to chapter 1 of ICRP (International Commission on Radiological Protection) Publication 119. See Table F.1 in Annex F. A copy of ICRP Publication 119 can be obtained from the ICRP website (www.icrp.org) or from the Water Quality Team, Department for Environment, Food and Rural Affairs, 3rd Floor, Seacole Block, 2 Marsham Street, London SW1P 4DF.

- (13) In Schedule 5 (fees)—
 - (a) in paragraph 1, omit "subject to the following maximum amounts";
 - (b) in the table—
 - (i) in the column headed "Service"—
 - (aa) for "check monitoring" substitute "monitoring of Group A parameters"; and
 - (bb) for "audit monitoring" substitute "monitoring of Group B parameters";
 - (ii) omit the column headed "Maximum fee (f)".