## SCOTTISH STATUTORY INSTRUMENTS

# 2014 No. 364

# The Public Water Supplies (Scotland) Regulations 2014

# PART 4

## MONITORING OF PUBLIC WATER SUPPLIES

### [<sup>F1</sup>Monitoring

**5.**—(1) Scottish Water must, in relation to water supplied by it, ensure that it carries out regular monitoring of the quality of any such water intended for human consumption purposes to check that the water available to consumers meets the water quality standards.

(2) Where Scottish Water has reason to suspect that the water contains a micro-organism, parasite or substance (in number or concentration) which—

- (a) poses a potential danger to human health; and
- (b) is not one of the parameters in Table A, Table B or Table C,

Scottish Water must ensure that monitoring is carried out to establish whether, at the point of compliance, the micro-organism, parasite or substance poses such a potential danger.

(3) Where disinfection forms part of the preparation or distribution of the water, Scottish Water must take all measures necessary to ensure that—

- (a) the efficiency of the disinfection treatment applied is verified; and
- (b) any contamination from disinfection by-products is kept as low as possible without compromising the disinfection.

(4) Scottish Water must ensure that the monitoring is carried out so as to ensure that the measured values are representative of the quality of the water consumed throughout the year.]

F1 Reg. 5 substituted (27.10.2017) by The Public Water Supplies (Scotland) Amendment Regulations 2017 (S.S.I. 2017/281), regs. 1(1), 4(2)

#### [<sup>F2</sup>Monitoring programmes

**6.**—(1) Scottish Water must prepare and implement a separate monitoring programme for each water supply zone (or part of a water supply zone) in so far as the water supply zone (or the part of it) relates to—

- (a) water introduced into, or supplied through or from, any part of the public water supply system, including water supplied by Scottish Water pursuant to an arrangement under section 6(1)(b) of the Water Services etc. (Scotland) Act 2005; or
- (b) water supplied by Scottish Water by any other means, including from a tanker or in bottles or containers.
- (2) Each monitoring programme prepared by Scottish Water must-
  - (a) meet its obligations under regulation 5;

- (b) meet the minimum requirements in Parts A to D of schedule 1A;
- (c) accord with the monitoring requirements in Parts E and F of schedule 1A;
- (d) ensure that the requirements of regulation 11, as read with schedule 2, and regulations 12 to 14 and 16 are met; and
- (e) comply with any other requirements specified in directions under regulation 15A.
- (3) Scottish Water must—
  - (a) determine the sampling points (for the purposes of each monitoring programme); and
  - (b) ensure that these sampling points meet the relevant requirements in-
    - (i) regulations 11 to 14 and 16; and
    - (ii) schedule 1A.

(4) The first monitoring programme for each water supply zone (or part of a water supply zone) prepared under paragraph (1) must be approved by the Drinking Water Quality Regulator for Scotland.

(5) Until a monitoring programme for a water supply zone (or part of a water supply zone) under paragraph (1) has been approved under paragraph (4), Scottish Water must ensure that a programme of monitoring is implemented within the water supply zone which—

- (a) complies with the minimum requirements of paragraphs (2) and (3); and
- (b) includes any additional monitoring that Scottish Water would be required to carry out (or cause to be carried out) under these Regulations, if these Regulations continued to have effect as they had effect immediately before 27th October 2017.

(6) Scottish Water may modify a monitoring programme which has been approved under paragraph (4) to include additional monitoring for any parameter, micro-organism, parasite or substance, provided that the programme, as modified, complies with paragraphs (2) and (3).

(7) Scottish Water may modify a monitoring programme which has been approved under paragraph (4) to [<sup>F3</sup>remove or reduce the monitoring of any parameter, micro-organism, parasite or substance required by that programme] only—

- (a) in accordance with conditions as are specified for those purposes in directions given under regulation 15A; or
- (b) where no such conditions are specified in directions given under regulation 15A, with the consent of the Drinking Water Quality Regulator for Scotland.]
- F2 Reg. 6 substituted (27.10.2017) by The Public Water Supplies (Scotland) Amendment Regulations 2017 (S.S.I. 2017/281), regs. 1(1), 4(3)
- **F3** Words in reg. 6(7) substituted (1.1.2023) by The Public Water Supplies (Scotland) Amendment Regulations 2022 (S.S.I. 2022/387), regs. 1(1), 4

#### Random samples from consumers' taps

<sup>F4</sup>7.....

F4 Regs. 7-10 omitted (27.10.2017) by virtue of The Public Water Supplies (Scotland) Amendment Regulations 2017 (S.S.I. 2017/281), regs. 1(1), 4(4)

#### Authorisation of samples from alternative points

F4 Regs. 7-10 omitted (27.10.2017) by virtue of The Public Water Supplies (Scotland) Amendment Regulations 2017 (S.S.I. 2017/281), regs. 1(1), 4(4)

#### Numbers of samples

F4 Regs. 7-10 omitted (27.10.2017) by virtue of The Public Water Supplies (Scotland) Amendment Regulations 2017 (S.S.I. 2017/281), regs. 1(1), 4(4)

#### **Additional sampling**

<sup>F4</sup>10.

F4 Regs. 7-10 omitted (27.10.2017) by virtue of The Public Water Supplies (Scotland) Amendment Regulations 2017 (S.S.I. 2017/281), regs. 1(1), 4(4)

#### Sampling at treatment works

11.—(1) Subject to paragraphs (2) and (3), in each year Scottish Water must take, or cause to be taken, from the point at which water leaves each treatment works which serves a water supply zone, the standard number of samples for analysis to determine—

- (a) the concentration of residual disinfectant;
- (b) whether water leaving the treatment works complies with the prescribed concentration or value for—
  - (i) coliform bacteria (item 3) in Table A;
  - (ii) Escherichia coli (item 4) in Table A; and
  - (iii) nitrite [<sup>F5</sup>(item 24)] in Table B (where the point of compliance is a treatment works);
  - (iv) colony count (item 5) in Table C; and
  - (v) turbidity (item 13) in Table C.

(2) Where, in each of two successive years, the analysis of samples taken in accordance with these Regulations establishes that—

- (a) for coliform bacteria, *Escherichia coli*, nitrite or turbidity (as the case may be), the prescribed concentration or value has not been exceeded; or
- (b) for colony count, there has been no significant increase in the count,

the number of samples to be taken in the following year in respect of that parameter from the point at which water leaves that treatment works may, subject to paragraph (3), be the reduced number.

(3) For coliform bacteria or, as the case may be, *Escherichia coli*, the reduced number of samples may be taken only if Scottish Water considers that—

- (a) there is no foreseeable risk that the supply will exceed the prescribed concentration or value for that parameter; or
- (b) the treatment works is designed to secure that, in the event of a failure of the disinfection process, water that has not been disinfected cannot enter the supply.
- (4) Samples required to be taken by this regulation must be taken at regular intervals.

(5) Where a treatment works is in use for only part of a year, the number of samples that must, under this regulation, be taken during that year (from the point at which water leaves the works) may be reduced in proportion to the number of days in that year that the works has not been in use.

(6) In this regulation—

"the reduced number" means the applicable number (if any) in column (4) of Table 4; and

"the standard number" means the applicable number in column (5) of Table 4.

**F5** Words in reg. 11(1)(b)(iii) substituted (1.1.2023) by The Public Water Supplies (Scotland) Amendment Regulations 2022 (S.S.I. 2022/387), regs. 1(1), 5

#### Sampling at service reservoirs

**12.** Scottish Water must take, or cause to be taken, from each of its service reservoirs in each week in which the service reservoir is in use, one sample for analysis—

- (a) for determining the concentration of residual disinfectant;
- (b) for testing for compliance with the prescribed concentration and value for-
  - (i) coliform bacteria (item 3) in Table A; and
  - (ii) Escherichia coli (item 4) in Table A; and
- (c) for determining whether the prescribed concentration or value for colony count (item 5) in Table C (in so far as the point of monitoring is a service reservoir) is complied with.

#### Sampling: water supplied by tanker

**13.**—(1) Where the distribution of water in any part of a water supply zone is by tanker and is (or is likely to be) an intermittent short-term supply, samples of water from each tanker from which the water is distributed must be taken—

- $[^{F6}(a)$  when the water is put into that tanker,
  - (b) 24 hours after the commencement of the distribution from that tanker, and
  - (c) every 24 hours from then on until the distribution is discontinued.]

(2) The first sample taken in relation to each distribution must be analysed for compliance with—

- (a) Escherichia coli (item 2) in Table A;
- (b) conductivity (item 7) in Table C; and
- (c) hydrogen ion (item 8) in Table C.

(3) The second and any subsequent samples must be analysed for compliance with every parameter in Table A, Table B and Table C.

[<sup>F7</sup>(4) This regulation does not apply where the distribution of water in any part of a water supply zone is by mobile tanker.]

F7 Reg. 13(4) inserted (1.1.2023) by The Public Water Supplies (Scotland) Amendment Regulations 2022 (S.S.I. 2022/387), regs. 1(1), **6(b)** 

**F6** Reg. 13(1)(a)-(c) substituted for reg. 13(1)(a)(b) (1.1.2023) by The Public Water Supplies (Scotland) Amendment Regulations 2022 (S.S.I. 2022/387), regs. 1(1), **6(a)** 

#### [<sup>F8</sup>Sampling: water supplied by mobile tanker

**13A.**—(1) Where the distribution of water in any part of a water supply zone is by mobile tanker and is (or is likely to be) an intermittent short-term supply, samples of water from each mobile tanker from which water is to distributed must be taken in accordance with paragraphs (2) and (3).

- (2) Samples must—
  - (a) be taken—
    - (i) when the water is put into the mobile tanker, and
    - (ii) immediately before the commencement of any distribution of water from that tanker, and
  - (b) be analysed for compliance with residual disinfectant (item 4) in Table 4.

(3) Unless paragraph (4) applies, a sample must be taken when the water is put into the mobile tanker and the sample must be analysed for compliance with *Escherichia coli* (item 2) and Coliform bacteria (item 3) in Table A.

(4) Where water is put into the mobile tanker from the same place on at least one other occasion within a period of 24 hours from the sample taken under sub-paragraph (3), a sample is not required to be taken on the second or any subsequent occasion that water is put into that tanker within that period.

(5) In regulation 13 and this regulation, "mobile tanker" means a container used to distribute water for human consumption purposes that has been treated and has been transported from one part of the public water supply system to another.]

F8 Reg. 13A inserted (1.1.2023) by The Public Water Supplies (Scotland) Amendment Regulations 2022 (S.S.I. 2022/387), regs. 1(1), 7

#### Sampling: new sources

14.—(1) This regulation applies in relation to—

- (a) any source of water which has not been used for the supply of water by Scottish Water at any time during the period of 6 months preceding 1st January 2015; and
- (b) any source of water which has been so used, but not so used during the period of 6 months preceding the date on which Scottish Water proposes to supply water from it.
- (2) Scottish Water must—
  - (a) before it supplies water from a source mentioned in paragraph (1)(a); and
  - (b) as soon as is reasonably practicable after it has begun to supply water from a source mentioned in paragraph (1)(b),

take, or cause to be taken, in accordance with paragraph (3), such samples of that water as will enable it to establish—

- (i) whether water can be supplied from that source without contravening section 76A(1) of the 1980 Act (duties of water authorities with respect to water quality); and
- (ii) the treatment necessary to ensure that section 76A(1) of the 1980 Act is complied with in relation to the supply of that water.
- (3) Samples must be taken—
  - (a) in the case of a source of water mentioned in paragraph (1)(a), in respect of-
    - (i) the parameters in Table A, Table B and Table C; and

- (ii) any other micro-organism, substance or parasite which may be present in, or any property of, the water which Scottish Water considers has the potential to cause a supply of water (from that source) to contravene section 76A(1) of the 1980 Act; and
- (b) in the case of a source mentioned in paragraph (1)(b), in respect of—
  - (i) enterococci (item 1) in Table A;
  - (ii) Escherichia coli (item 2 and item 4) in Table A;
  - (iii) coliform bacteria (item 3) in Table A;
  - (iv) conductivity (item 7) in Table C;
  - (v) hydrogen ion (item 8) in Table C;
  - (vi) turbidity (item 13) in Table C; and
  - (vii) any other parameter in Table B or Table C in relation to which Scottish Water considers that the concentration or value of that parameter is likely to have altered since the last occasion on which water from that source was analysed.

(4) Unless the conditions in paragraph (5) are satisfied, Scottish Water must not supply water for human consumption purposes from a source mentioned in paragraph (1)(a) until a period of one month has elapsed since the day on which Scottish Water complied with regulation 31(1) (as read with regulation 30) with respect to the source.

- (5) The conditions are that Scottish Water—
  - (a) must supply water from the source as a matter of urgency in order to prevent an unexpected interruption in a piped supply of water to consumers; and
  - (b) before the supply is made, has carried out a risk assessment under regulation 30 specifically with respect to the source.

(6) For the purposes of paragraph (4) (in so far as it requires compliance with regulation 31(1)) and paragraph (5)(b), regulation 30 applies in relation to each supply of water mentioned in those paragraphs as if "treatment works" includes the source from which the untreated water is supplied.

#### [<sup>F9</sup>Methods of analysis

**14A.**—(1) Scottish Water must ensure that the method used for the analysis of a parameter in a sample of water pursuant to regulation 5—

- (a) complies with the specifications for the analysis of the parameter in schedule 3; or
- (b) produces results which are at least as reliable as those produced by a method which complies with the specifications for the analysis of the parameter in schedule 3.
- (2) A method of analysis in relation to which paragraph (1)(b) applies may be used only if—
  - (a) Scottish Water has provided all relevant information concerning the method and its equivalence to—
    - (i) the Drinking Water Quality Regulator for Scotland; and
    - (ii) the Scottish Ministers; and
  - (b) the Drinking Water Quality Regulator for Scotland-
    - (i) is satisfied that it can be demonstrated that the alternative method produces results which are at least as reliable as those produced by a method which complies with the specifications for the analysis of the parameter in schedule 3; and
    - (ii) has confirmed this by notice to Scottish Water.]

F9 Reg. 14A inserted (27.10.2017) by The Public Water Supplies (Scotland) Amendment Regulations 2017 (S.S.I. 2017/281), regs. 1(1), 4(5)

#### Collection and analysis of samples

**15.**—(1) Scottish Water must ensure, so far as is reasonably practicable, that in taking, handling, transporting, storing and analysing any sample required to be taken for the purposes of this Part, or causing any such sample to be taken, handled, transported, stored and analysed, the appropriate requirements are satisfied.

(2) In paragraph (1) "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 sample is not contaminated when being taken;
- (c) the sample is kept at such temperature and in such conditions as will secure that there is no material alteration of the concentration or value or specification for the measurement or observation for which the sample is intended;
- (d) the sample is analysed as soon as may be 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; and
- (e) any laboratory at which samples are analysed has a system of analytical quality control that is subjected from time to the to checking by a person who is—
  - (i) not under the control of either the laboratory or Scottish Water; and
  - (ii) approved by the Scottish Ministers for that purpose.

(3) For the purposes of paragraph (2)(e), "laboratory at which samples are analysed" includes a person who undertakes the analysis of samples for this Part, whether at the time and place where the samples are taken or otherwise.

(4) Scottish Water must maintain such records as are sufficient to enable it to establish, in relation to each sample taken for the purposes of this Part, that such of the appropriate requirements as are applicable to that sample have been satisfied.

<sup>F10</sup> (5)	
<sup>F10</sup> (6)	
<sup>F10</sup> (7)	
<sup>F10</sup> (8)	
<sup>F10</sup> (9)	
<sup>F10</sup> (10)	
<sup>F10</sup> (11)	

**F10** Reg. 15(5)-(11) omitted (27.10.2017) by virtue of The Public Water Supplies (Scotland) Amendment Regulations 2017 (S.S.I. 2017/281), regs. 1(1), 4(6)

#### [<sup>F11</sup>Directions and guidance

**15A.**—(1) The Drinking Water Quality Regulator for Scotland may give directions (whether general or specific) and guidance to Scottish Water (whether one or more) as to, or in relation to, the exercise of Scottish Water's functions under this Part.

(2) Directions under paragraph (1) may include provision—

- (a) as to the cases and circumstances in which Scottish Water is, or is not, to exercise any of the powers conferred on Scottish Water by these Regulations;
- (b) the manner in which those powers are to be exercised; and
- (c) for any matter to which the directions relate to be determined, in such manner (if any) as the directions may specify, by a person other than Scottish Water.
- (3) Scottish Water must—
  - (a) comply with any such directions; and
  - (b) have regard to any such guidance.]

F11 Reg. 15A inserted (27.10.2017) by The Public Water Supplies (Scotland) Amendment Regulations 2017 (S.S.I. 2017/281), regs. 1(1), 4(7)

**Changes to legislation:** There are currently no known outstanding effects for the The Public Water Supplies (Scotland) Regulations 2014, PART 4.