STATUTORY INSTRUMENTS

2016 No. 614

WATER, ENGLAND AND WALES

The Water Supply (Water Quality) Regulations 2016

Made - - - - 26th May 2016

Laid before Parliament 1st June 2016

Coming into force - - 27th June 2016

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

- (a) sections 67, 69, 77(3) and (4) and 213(2) of the Water Industry Act 1991 F1, and
- (b) in relation to regulations 26, 31 and 33, section 2(2) of the European Communities Act 1972 F2.

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 ^{F3}.

- F1 1991 c.56; the functions of the Secretary of State under section 67 were transferred to the National Assembly for Wales ("the Assembly") (a) for the making of regulations concerning water supplied using the supply system of a water undertaker, in relation to the supply system of any water undertaker whose area is wholly or mainly in Wales, and (b) for the making of regulations concerning water supplied other than using the supply system of a water undertaker, in relation to Wales, by article 2 of, and Schedule 1 to, the National Assembly for Wales (Transfer of Functions) Order 1999 (S.I. 1999/672) ("the Order"); the functions of the Secretary of State under section 69 were, in relation to any water undertaker whose area is wholly or mainly in Wales and any licensed water supplier so far as relating to licensed activities using the supply system of any such water undertaker, transferred to the Assembly by the same provision of the Order; the functions of the Secretary of State under section 77 were transferred to the Assembly in relation to Wales by the same provision of the Order; the functions of the Secretary of State under section 213 were made exercisable by the Assembly to the same extent as the powers to which that section applies were made exercisable by the Assembly by virtue of the same provision of the Order; see the entry in Schedule 1 to the Order. By virtue of paragraph 30 of Schedule 11 to the Government of Wales Act 2006 (c.32), the functions transferred to and made exercisable by the Assembly are now exercisable by the Welsh Ministers. Section 69 was amended by paragraph 19 of Schedule 8, and Part 3 of Schedule 9, to the Water Act 2003 (c.37). It is prospectively amended by paragraph 68 of Schedule 7 to the Water Act 2014 (c.21) from a date to be appointed. 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. It is prospectively amended by paragraph 119(4) of Schedule 7 to the Water Act 2014 from a date to be appointed.
- F2 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).

F3 S.I. 2008/301.

Modifications etc. (not altering text)

C1 Regulations applied (Isles of Scilly) (27.3.2020) by The Isles of Scilly (Application of Water Legislation) Order 2020 (S.I. 2020/214), art. 5(u)

PART 1

General

Citation, commencement and application

- 1.—(1) These Regulations may be cited as the Water Supply (Water Quality) Regulations 2016 and come into force on 27th June 2016 immediately after the commencement of the Private Water Supplies (England) Regulations 2016 ^{F4}.
 - (2) Parts 1 to 9 and 11 of these Regulations apply in relation to the supply of water by every—
 - (a) water undertaker F5 whose area is not wholly or mainly in Wales;
 - (b) [F6water supply licensee] so far as relating to licensed activities not using the supply system of a water undertaker whose area is wholly or mainly in Wales.
- (3) Part 10 of these Regulations applies to local authorities in England, as regards the discharge of functions under that Part, in relation to every—
 - (a) water undertaker whose area is wholly in England;
 - (b) water undertaker whose area is partly in England and partly in Wales, but only in respect of the part in England;
 - (c) [F7water supply licensee] so far as relating to licensed activities not using the supply system situated in Wales of any water undertaker.
 - **F4** S.I. 2016/573.
 - **F5** See section 6 of the Act for the meaning of "water undertaker".
 - **F6** Words in reg. 1(2)(b) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(2)**
 - F7 Words in reg. 1(3)(c) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(2)

Interpretation

- 2.—(1) In these Regulations—
 - "the 2000 Regulations" means the Water Supply (Water Quality) Regulations 2000 F8;
 - "the Act" means the Water Industry Act 1991;
 - "appropriate local authority" in relation to—
 - (a) a departure authorised under regulation 22,
 - (b) an application for any such authorisation, or
 - (c) an event specified in regulation 35(6),

means a local authority whose area contains any part of the water supply zone to which the authorisation relates or, in the case of an application, would relate if a departure were authorised in the terms sought, or whose area is affected or is likely to be affected by the event;

F9

"blending point" means a point at which water originating from two or more sources and treated for the purposes of their supply for regulation 4(1) purposes is combined under conditions that are designed to secure that, after such combination, the requirements of regulation 4(2) are met;

"Chapter 3" means Chapter 3 of Part 3 of the Act (quality and sufficiency of water supplies);

F9 ...

"consumer" means a person to whom water is supplied for regulation 4(1) purposes by a relevant supplier in the discharge of its duties under Chapter 3;

"disinfection" means a process of water treatment to remove or render harmless to human health every pathogenic micro-organism and pathogenic parasite that would otherwise be present in the water;

[F11"E. coli" means Escherichia coli;]

"groundwater" means water contained in underground strata, and section 221(3) of the Water Resources Act 1991 F12 has effect for the purposes of this definition as it has effect for the purpose of construing references in that Act to water contained in underground strata;

"indicative dose" (ID) means the committed effective dose for 1 year of ingestion resulting from all the radionuclides whose presence has been detected in a supply of water intended for human consumption, of natural and artificial origin, excluding tritium, potassium-40, radon and short-lived radon decay products;

"indicator parameter" means a parameter listed in Schedule 2;

"local authority" means any of the following-

- (a) the Common Council of the City of London;
- (b) a London Borough Council;
- (c) a district council;
- (d) the council of a county in which there are no district councils;

[F11"monitoring of a Group A parameter" has the meaning given in regulation 5(1);]

[FII"monitoring of a Group B parameter" has the meaning given in regulation 5(3);]

[FII-commonitoring programme" means a programme for the identification of, and collection of data on, any substance or organism identified during a risk assessment to confirm compliance with the prescribed concentrations set out in Schedule 1 which—

- (a) consists of either or both of the following—
 - (i) collection and analysis of discrete water samples;
 - (ii) measurements recorded by a continuous monitoring process, and
- (b) may in addition consist of either or both of the following
 - inspections of records of the functionality, and maintenance status, of equipment;
 - (ii) inspections of the catchment area, water abstraction, treatment, storage and distribution infrastructure;]

"National Public Health Service for Wales" means an NHS trust within the meaning of the National Health Service (Wales) Act 2006 F13 if and insofar as it has the function of providing services in relation to public health in Wales;

"NTU" means Nephelometric Turbidity Unit;

"parameter" means a property, element, organism or substance listed in column 2 of Table A or of Table B in Schedule 1, or in Schedule 2, as read, where appropriate, with the notes to those Tables and to Schedule 2;

"pesticides and related products" means any of the following, and includes their relevant metabolites, degradation and reaction products—

- (a) organic insecticide;
- (b) organic herbicide;
- (c) organic fungicide;
- (d) organic nematocide;
- (e) organic acaricide;
- (f) organic algicide;
- (g) organic rodenticide;
- (h) organic slimicide;
- (i) any product related to any of (a) to (h) (including any growth regulator);

"prescribed concentration or value", in relation to any parameter, means the maximum or minimum concentration or value specified in relation to that parameter in 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 with the notes to those Tables;

"Public Health England" means the executive agency of that name of the Department of Health [F14 and Social Care];

"radioactive parameters" means the following indicator parameters listed in Schedule 2—

- (a) indicative dose (item 8);
- (b) radon (item 9);
- (c) tritium (item 12);

"regulation 4(1) purposes", in relation to a supply of water, means a supply to premises—

- (a) for such domestic purposes as consist in or include, cooking, drinking, food preparation or washing, or
- (b) for food production purposes F15;

"relevant supplier" means a water undertaker or [F16water supply licensee];

[F17" retail licensee" means a person who is the holder of a water supply licence with a retail authorisation within the meaning of Schedule 2A to the Act;]

"sampling point"—

- (a) in relation to water supplied from a distribution network, means a point, being a consumer's tap, that is selected for the purposes of Part 4 of these Regulations;
- (b) in relation to water supplied from a tanker, means the point at which the water emerges from the tanker;

"specification" in relation to an indicator parameter, means the concentration, value or state shown as applicable to that parameter in Schedule 2, as measured by reference to the unit of measurement so shown; "state", in relation to an indicator parameter, means the state specified in relation to that parameter in Schedule 2, as measured by reference to the unit of measurement so specified;

[FII"suitably accredited body" means the Secretary of State or a person acting on behalf of the Secretary of State;]

"supply point" means a blending point, service reservoir, treatment works or other point, not being a sampling point, which the Secretary of State authorises under regulation 8, for the purposes of regulation 6;

"supply system" is to be construed in accordance with section 17B(4A) of the Act F18;

"water of a relevant description" means water supplied by a relevant supplier which uses a supply system for the purposes of supplying water to consumers, being a supply system into which the water undertaker or [F19] wholesale licensee] introduces water;

"water supply zone" in relation to a water undertaker and a [F20 water supply licensee] and a year, means an area designated for that year by the water undertaker in accordance with regulation 3;

[F21" wholesale licensee" means a person who is the holder of a water supply licence with a wholesale authorisation within the meaning of Schedule 2A to the Act;]

"year" means a calendar year.

- (2) In these Regulations a reference to an application or notice includes a reference to that application or notice in electronic form.
- (3) Subject to paragraph (4), references in these Regulations to a service reservoir are references to any structure ^{F22}..., 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 [F23 sole] purpose of meeting a variable demand for the supply of water.
- (4) Where references in these Regulations to a service reservoir would, but for this paragraph, include references to a structure comprising more than one compartment—
 - (a) each compartment which has its own water inlet and water outlet and is not connected hydraulically to any other compartment is to be treated as a single service reservoir,
 - (b) the compartments that are connected hydraulically are to be treated as a single service reservoir, and
 - (c) unless all of the compartments are connected hydraulically, the structure as a whole is not to be treated as a service reservoir.
- [F²⁴(5) In these Regulations, a reference to an EU or Euratom Directive is to be read as if any reference in that Directive to one or more member States in a provision imposing an obligation on, or conferring a discretion on, a member State or member States were a reference to either the Secretary of State or local authority depending on which, immediately before exit day, was responsible for the United Kingdom's compliance with that obligation, or able to exercise that discretion, in respect of England or Wales.]
 - F8 S.I. 2000/3184, as amended by S.I. 2001/2885, 2002/2469, 2005/2035, 2007/2734, 2010/991, 2013/235, 1387.
 - F9 Words in reg. 2(1) omitted (11.7.2018) by virtue of The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), 2(2)(a)(i)
 - **F10** Words in reg. 2 omitted (31.3.2017) by virtue of The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(3)(a)
 - **F11** Words in reg. 2(1) inserted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(2)(a)(ii)**
 - **F12** 1991 c.57.

- F13 2006 c.42.
- F14 Words in reg. 2(1) inserted (11.4.2018) by The Secretaries of State for Health and Social Care and for Housing, Communities and Local Government and Transfer of Functions (Commonhold Land) Order 2018 (S.I. 2018/378), art. 1(2), Sch. para. 20(gg) (with art. 14)
- F15 See section 93(1) of the Act for the meaning of "food production purposes".
- F16 Words in reg. 2 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(3)(b)
- F17 Words in reg. 2 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(3)(c)
- F18 Section 17B was inserted by paragraph 2 of Schedule 4 to the Water Act 2003. It is prospectively amended by section 2 of, and paragraph 6 of Schedule 5 and paragraph 10 of Schedule 7 to, the Water Act 2014 from a date to be appointed.
- **F19** Words in reg. 2 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(3)(d)**
- **F20** Words in reg. 2 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(3)(e)
- **F21** Words in reg. 2 inserted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(3)(f)
- F22 Words in reg. 2(3) omitted (11.7.2018) by virtue of The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), 2(2)(b)(i)
- **F23** Word in reg. 2(3) inserted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), 2(2)(b)(ii)
- **F24** Reg. 2(5) inserted (31.12.2020) by The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/558), regs. 1(1), **18(2)**; 2020 c. 1, Sch. 5 para. 1(1)

PART 2

Water supply zones

Water supply zones

- **3.**—(1) Before the beginning of each year in which it intends to supply water, a water undertaker must designate the name and areas within its area of supply that are to be its water supply zones for that year.
- (2) A water supply zone may not comprise an area whose population immediately before the beginning of the year in question is estimated by the water undertaker to exceed 100,000.
 - (3) The water quality within a water supply zone must be approximately uniform.
- (4) A water undertaker may not vary a designation under paragraph (1) after the beginning of the year in relation to which the designation has effect.

PART 3

Wholesomeness

Wholesomeness

- **4.**—(1) Water supplied to premises [F25that is intended for human consumption including]—
 - (a) for such domestic purposes as consist in or include, cooking, drinking, food preparation or washing, or

(b) for food production purposes,

is, subject to paragraphs (4) and (5), to be regarded as wholesome for the purposes of Chapter 3, as it applies to the supply of water for those purposes, if the requirements of paragraph (2) are satisfied.

- (2) The requirements of this paragraph are—
 - (a) that the water does not contain—
 - (i) any micro-organism (other than a parameter listed in Schedule 1) or parasite, or
 - (ii) any substance (other than a parameter listed in Schedule 1),

at a concentration or value which would constitute a potential danger to human health;

- (b) that the water does not contain any substance (whether or not a parameter) at a concentration or value which, in conjunction with any other substance it contains (whether or not a parameter) would constitute a potential danger to human health;
- (c) that the water does not contain concentrations or values of the parameters listed in Tables A and B in Schedule 1 in excess of or, as the case may be, less than, the prescribed concentrations or values;
- (d) that the water satisfies the formula "[nitrate]/50 + [nitrite]/3 \leq 1", where the square brackets signify the concentrations in mg/1 for nitrate (NO₃) and nitrite (NO₂).
- (3) The point at which the requirements of paragraph (2), insofar as they relate to the parameters set out in Part I of Table A and in Table B in Schedule 1, are to be complied with is—
 - (a) in the case of water supplied from a tanker, the point at which the water emerges from the tanker;
 - (b) in the case of water supplied in bottles or containers, the point at which the water first emerges from any bottle or container collected from a local distribution point;
 - (c) in the case of water used in a food production undertaking, the point at which it is used in the undertaking;
 - (d) in any other case, the consumer's tap.
- (4) Water supplied for regulation 4(1) purposes must not be regarded as wholesome for the purposes of Chapter 3 if, on transfer from a treatment works for supply for those purposes—
 - (a) it contains a concentration of the coliform bacteria or *E. coli* parameter (items 1 and 2 in Part II of Table A in Schedule 1) in excess of the prescribed concentrations,
 - (b) it contains a concentration of nitrite in excess of 0.1mgNO₂/1.
- (5) Subject to paragraph (6), water supplied for regulation 4(1) purposes is not to be regarded as wholesome for the purposes of Chapter 3 if, on transfer from a service reservoir for supply for those purposes, it contains a concentration of the coliform bacteria or *E. coli* parameter in excess of the prescribed concentrations.
- (6) Water transferred from a service reservoir for supply for regulation 4(1) purposes is to be regarded as unwholesome if more than 5% of samples taken in a year exceed the prescribed concentration for the coliform bacteria parameter.
 - F25 Words in reg. 4(1) inserted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), 2(3)

PART 4

Monitoring of water supplies

Interpretation and application of Part 4

- **5.**—[F²⁶(1) In this Part, "monitoring of a Group A parameter" means monitoring of a Group A parameter 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.]
- [F26(2)] A Group A parameter must be monitored to determine whether its presence 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.]
- [F26(3)] In this Part, "monitoring of a Group B parameter" means monitoring of a Group B parameter for the purpose of obtaining information from which it may be established whether water supplied for regulation 4(1) purposes—
 - (a) 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;
 - (b) meets the specifications for indicator parameters;
 - (c) in respect of other parameters identified as relevant by the Secretary of State under regulation 9, meets the specifications for those parameters.]
- (4) This Part applies to water supplied for regulation 4(1) purposes by a relevant supplier in the performance of its duties under Chapter 3.
- (5) Regulations 6 to 10 apply to a [F27wholesale licensee] in relation to samples taken from supply points as they apply to a water undertaker, but only insofar as the [F27wholesale licensee] is introducing water into a water supply zone in which the water undertaker takes samples under this Part (to the extent authorised by or under regulation 8) from supply points.
 - [F28(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, as the case may be, Table 3 in Schedule 3.]
 - **F26** Reg. 5(1)-(3) substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(4)(a)**
 - **F27** Words in reg. 5(5) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(4)**
 - **F28** Reg. 5(6) inserted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(4)(b)**

Monitoring: general provisions

- **6.**—(1) Paragraph (2) applies for the purpose of determining whether water to which this Part applies satisfies the provisions of Part 3 or, if a departure has been authorised under Part 7 in relation to that supply, those provisions as read with the terms of that authorisation.
- (2) A water undertaker must take or cause to be taken, and analyse or cause to be analysed, not less than the number of samples of the water within each of the water supply zones which it supplies specified in, or in accordance with the provisions of, this Part and Schedule 3.
- [F29(3) Except in a case to which paragraph (16) applies, the parameters listed in Tables A and B in Schedule 1 and the indicator parameters must be subject to—
 - (a) monitoring of a Group A parameter if the parameter is one listed in column 2 of Table 1 in Schedule 3 and the circumstances specified in column 3 of that Table apply;
 - (b) monitoring of a Group B parameter in any other case.]
- (4) In the application of paragraph (3)(b) to the aluminium, F30 ..., iron and manganese parameters (items 1, I^{F31} 9 and 10] in Table 1 in Schedule 3), a supply which consists of both groundwater and surface water is deemed to be a supply which consists only of surface water.
- [F32(5) 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.]
 - (6) Paragraphs (7) to (15) apply to the radioactive parameters.
 - (7) As regards the indicative dose parameter—
 - (a) monitoring must be carried out where an artificial source of radionuclides or elevated natural radioactivity is present and it cannot be shown on the basis of other representative [F33 surveillance] programmes or other investigations that the level of indicative dose is below the value specified in Schedule 2;
 - (b) where monitoring for natural radionuclide levels is required, the Secretary of State must define the frequency of the monitoring of either gross alpha activity, gross beta activity or individual natural radionuclides, depending on the screening strategy adopted in accordance with Schedule 4;
 - (c) where the monitoring frequency defined in accordance with sub-paragraph (b) requires one sample per year for naturally occurring radioactivity, a further sample must be taken where any change occurs in relation to the supply that is likely to influence the concentrations of radionuclides in water supplied for regulation 4(1) purposes;
 - (d) in the case of naturally occurring radionuclides where the results of the monitoring referred to in sub-paragraph (b) show that the concentration of radionuclides in the supply is stable, the minimum sampling and analysis frequencies are to be decided by the Secretary of State and confirmed by notice to the water undertaker, taking into account the risk to human health;
 - (e) a water undertaker may use a screening strategy for gross alpha, gross beta activity or individual radionuclides and, in the event that there is any exceedance of the value specified in Schedule 2, it must carry out an analysis of the specific radionuclides in accordance with Schedule 4.
 - (8) As regards the radon parameter—
 - (a) a water undertaker must ensure that a representative survey is carried out in accordance with paragraph (9) to determine the likelihood of a supply failing the parametric value for radon specified in Schedule 2;

- (b) monitoring must be carried out where there is reason to believe, on the basis of the results of the representative surveys or other reliable information, that the parametric value for radon might be exceeded.
- (9) A representative survey must be designed in such a way—
- (i) as to be capable of determining the scale and nature of likely exposures to radon in water intended for human consumption originating from different types of groundwater sources and wells in different geological areas;
- (ii) that the underlying parameters, in particular the geology and hydrology of the area, radioactivity of rock or soil, and well type, can be identified and used to direct further action to areas of likely high exposure.
- (10) As regards the tritium parameter—
 - (a) monitoring must be carried out where an anthropogenic source of tritium or other artificial radionuclides is present within the catchment area and it cannot be shown on the basis of other surveillance programmes or investigations that the level of tritium is below the parametric value specified in Schedule 2;
 - (b) if the concentration of tritium exceeds its parametric value, an investigation of the presence of other artificial radionuclides must be carried out.
- (11) Where a parametric value is exceeded in a particular sample, the Secretary of State must define the extent of re-sampling necessary to ensure that the measured values are representative of an average activity concentration for a full year.
- (12) The Secretary of State may notify a water undertaker which supplies water to a water supply zone that a radioactive parameter need not be monitored if the Secretary of State is satisfied that, for the period specified in the notice, the water supplied to that zone for regulation 4(1) purposes—
 - (a) gives rise to a calculated indicative dose that is below the parametric value specified in Schedule 2,
 - (b) contains levels of radon that are below the parametric value specified in Schedule 2,
 - (c) contains levels of tritium that are below the parametric value specified in Schedule 2.
- (13) Where paragraph (12) applies, the Secretary of State must [F34publish, in such manner as the Secretary of State considers appropriate, the grounds for the notification] with the necessary documentation supporting the decision (including the findings of any surveys, monitoring or investigations carried out).
 - (14) The Secretary of State must by notice in writing withdraw a notice under paragraph (12)—
 - (a) given in relation to the indicative dose parameter, if the Secretary of State believes that water supplied to the zone in question for regulation 4(1) purposes gives rise to a calculated indicative dose that is likely to exceed the parametric value specified in Schedule 2;
 - (b) given in relation to the radon parameter, if the Secretary of State believes that water supplied to the zone in question for regulation 4(1) purposes contains levels of radon that are likely to exceed the parametric value specified in Schedule 2;
 - (c) given in relation to the tritium parameter, if the Secretary of State believes that water supplied to the zone in question for regulation 4(1) purposes contains levels of tritium that are likely to exceed the parametric value specified in Schedule 2.
- (15) A water undertaker which receives a notice under paragraph (14) must monitor or cause to be monitored the indicative dose parameter or, as the case may be, the radon or tritium parameter, in accordance with Tables [F358 to 13 (as applicable)] in Schedule 3.
- (16) 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—

- (a) [F36at] the commencement of the distribution from that tanker, and
- (b) every 48 hours thereafter until the distribution is discontinued.
- (17) The first sample taken in relation to each distribution must be analysed for compliance with the following parameters—
 - (a) E. coli (item 2 in Part II of Table A in Schedule 1), and
 - (b) conductivity (item 6 in Schedule 2).
- (18) The second and any subsequent samples must be analysed for compliance with those and every other parameter.
- (19) On the coming into force of these Regulations, a notification under regulation 6(7) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notification under paragraph (12) of this regulation.
 - F29 Reg. 6(3) substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), 2(5)(a)
 - **F30** Words in reg. 6(4) omitted (11.7.2018) by virtue of The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(5)(b)(i)**
 - **F31** Words in reg. 6(4) substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(5)(b)(ii)**
 - **F32** Reg. 6(5) substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(5)(c)**
 - **F33** Word in reg. 6(7) substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(5)(d)**
 - **F34** Words in reg. 6(13) substituted (31.12.2020) by The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/558), regs. 1(1), **18(3)**; 2020 c. 1, Sch. 5 para. 1(1)
 - F35 Words in reg. 6(15) substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), 2(5)(e)
 - **F36** Word in reg. 6(16)(a) substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(5)(f)**

Sampling points

7. Except in relation to water supplied from a tanker, sampling points in respect of every parameter, other than a parameter for which samples are taken from a supply point authorised by or under regulation 8, must be selected at random unless, by notice in writing to a water undertaker (whether or not on the application of the undertaker), the Secretary of State otherwise determines.

Authorisation of supply points

- **8.**—(1) For those parameters specified as [F37 item 6 in column 1 of Table 1, and as [F38 items 1 to 12] and 14 to 21 in column 1 of Table 3] in Schedule 3, samples may be taken from—
 - (a) any blending point;
 - (b) the water leaving any service reservoir which receives water from a treatment works before its supply to any consumer;
 - (c) the water leaving any treatment works.
- (2) If the Secretary of State is satisfied that analysis of those samples will produce data which are unlikely to differ in any material respect from the data that would be produced from analysis within the sampling points, the Secretary of State may authorise the use for the purposes of regulation 6 of those samples taken for a water supply zone from a blending point, a service reservoir of that description or a treatment works.

- (3) In respect of any water supply zone, the taking of samples from a supply point is not authorised under paragraph (2) where a [F39] wholesale licensee] introduces water into the water supply zone, unless the water quality within the water supply zone remains approximately uniform.
- (4) Subject to paragraph (6), the Secretary of State may, in relation to any parameter not covered by an authorisation given under paragraph (2), on the written application of a water undertaker or on the joint written application of a water undertaker and [F40] wholesale licensee], authorise the use for the purposes of regulation 6 of samples taken for a water supply zone otherwise than from a sampling point.
- (5) An authorisation under paragraph (4) may extend to all samples in relation to that parameter or to such number or proportion of those samples as is specified in the authorisation.
- (6) The Secretary of State must not grant an authorisation under paragraph (4) unless the Secretary of State is satisfied that analysis of samples taken from a point other than a sampling point will produce data in respect of the parameter in question which are unlikely to differ in any material respect from the data that would be produced in respect of that parameter from analysis of samples obtained from sampling points.
- (7) The Secretary of State may at any time vary or revoke an authorisation under paragraph (2) or (4).
- (8) But, unless it appears to the Secretary of State that the immediate modification or revocation of an authorisation under paragraph (4) is required in the interests of public health, the Secretary of State must give the water undertaker to which the authorisation relates at least 6 weeks' notice of the Secretary of State's intention to modify or revoke before making such modification or revocation.
- (9) A water undertaker must notify the Secretary of State as soon as it has reasonable grounds for believing that an analysis of samples taken for a water supply zone from a point other than a sampling point would produce data in respect of the parameter in question which would differ in a material respect from the data produced by an analysis of samples taken from any of the sampling points within that zone.
- (10) On being notified under paragraph (9) and without the need for prior notice to the water undertaker, the Secretary of State must revoke the authorisation under paragraph (4).
 - (11) On the coming into force of these Regulations—
 - (a) an authorisation under regulation 8(1) of the 2000 Regulations is taken to be an authorisation given under paragraph 8(2) of this regulation;
 - (b) an authorisation under regulation 8(2) of the 2000 Regulation which had effect immediately before the coming into force of these Regulation is taken to be an authorisation under paragraph 8(4) of this regulation.
 - **F37** Words in reg. 8(1) substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(6)**
 - **F38** Words in reg. 8(1) substituted (29.3.2019) by The Environment, Food and Rural Affairs (Miscellaneous Amendments etc.) Regulations 2019 (S.I. 2019/526), regs. 1(2), 6(2)
 - **F39** Words in reg. 8(3) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)
 - **F40** Words in reg. 8(4) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(4)**

Numbers of samples

- [^{F41}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) In respect of any parameter not referred to in paragraph (1), the Secretary of State may specify—
 - (a) the number of samples which a water undertaker must take or cause to be taken from its sampling points in each year;
 - (b) its prescribed concentration or value.
 - (3) Samples required to be taken by this regulation must—
 - (a) be taken at regular intervals;
 - (b) in respect of sampling for chemical parameters in the distribution network other than sampling at a consumer's tap, be taken and handled 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"; and
 - (c) in respect of microbiological parameters in the distribution network and at a consumer's tap, be taken and handled in accordance with European standard EN ISO 19458 entitled "Water Quality Sampling for microbiological analysis" using sampling procedure A in the distribution network and sampling procedure B at a consumer's tap.
- (4) Subject to paragraph (5), the Secretary of State may, in respect of any supplies of water by a water undertaker to a water supply zone, treatment works, supply points or a service reservoir, give the water undertaker written notice of any variation of—
 - (a) the parameters subject to sampling (by the omission or addition of parameters);
 - (b) the number of samples which the undertaker must take in the period specified in the notice.
 - (5) Paragraph (4) does not apply in relation to E. coli.
 - (6) The Secretary of State may give a notice under paragraph (4)—
 - (a) on the Secretary of State's own motion; or
 - (b) where paragraph (8) applies, upon application by a water undertaker.
 - (7) A notice under paragraph (4)—
 - (a) must specify which parameters are subject to a variation;
 - (b) must specify the extent of any variation from the standard number of samples required to be taken under paragraph (1) or from the number of samples required to be taken under paragraph (2);
 - (c) may require a risk assessment to be undertaken;
 - (d) may be revoked or varied by the Secretary of State.
 - (8) This paragraph applies where—

- (a) a risk assessment complying with this regulation has been undertaken and indicates that no factor can be reasonably anticipated to be likely to cause deterioration of the quality of the water;
- (b) in the case where the water undertaker seeks to cease monitoring a particular parameter, the results from samples taken in respect of the parameter collected at regular intervals over a period of at least three years are all at less than 30% of the parametric value of the parameter; and
- (c) in the case where the water undertaker seeks to reduce the frequency of monitoring in respect of a particular parameter, 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 of the parameter.
- (9) The Secretary of State must by further written notice withdraw a notice given under paragraph (4) if the Secretary of State believes that any parameter in the water supply to which the notice relates contravenes the prescribed concentration or value or is likely to do so.
- (10) A water undertaker given a notice under paragraph (4) must institute a monitoring programme which must be kept under annual review.
 - (11) A risk assessment complies with this regulation where—
 - (a) it meets the principles of European Standard EN 15975-2 entitled "Security of drinking water supply Guidance for risk and crisis management Part 2: Risk management" or of other equivalent standards accepted at international level;
 - (b) it is subject to a system of quality control which is checked from time to time by a suitably accredited body; and
 - (c) it takes 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.
- (12) 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.
- [F42(13)] For the purposes of paragraph (11)(c), Articles 7(1) and 8 of Directive 2000/60/EC are to be read with the following modifications—
 - (a) as if any reference to Annex 5 to that Directive were a reference to that Annex as modified by Part 1 of Schedule 5 to the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017;
 - (b) in Article 8, as if—
 - (i) in paragraph 1, the final indent were omitted;
 - (ii) in paragraph 2, the first sentence were omitted;
 - (iii) paragraph 3 were omitted.]]
 - **F41** Reg. 9 substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(7)**
 - **F42** Reg. 9(13) inserted (31.12.2020) by The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/558), regs. 1(1), **18(4)**; 2020 c. 1, Sch. 5 para. 1(1)

Sampling: further provisions

10.—(1) Paragraph (2) applies as soon as a relevant supplier has reasonable grounds for believing that any element, organism or substance, other than a residual disinfectant or a parameter (whether alone or in combination with any parameter or any other element, organism or substance) may cause

the supply within any of the water supply zones which it supplies to be a supply which does not satisfy—

- (a) the provisions of Part 3, or
- (b) if a departure has been authorised under Part 7, those provisions as read with the terms of that authorisation.
- (2) Where this paragraph applies, the relevant supplier must take or cause to be taken sufficient samples from water within that zone (whether from a service reservoir, a treatment works or otherwise) in respect of any element, organism or substances, in order to establish whether that water is wholesome.

PART 5

Monitoring – additional provisions

Interpretation of Part 5 F43 F43 Reg. 11 omitted (11.7.2018) by virtue of The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), 2(8)

Sampling for particular substances and parameters

- 12.—(1) For the purposes of establishing the quality of water to be supplied to any of its water supply zones, a water undertaker must take or cause to be taken, and analyse or cause to be analysed, not less than the number of samples specified in this Part.
- (2) For the purposes of establishing the quality of water to be supplied in any supply system into which a [^{F44}wholesale licensee] introduces water, the [^{F44}wholesale licensee] must take or cause to be taken, and analyse or cause to be analysed, not less than the number of samples specified in this Part.
 - **F44** Words in reg. 12(2) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(4)**

Sampling at treatment works

- 13.—(1) Subject to [F45 paragraph (6)], in each year every water undertaker or [F46 wholesale licensee] must take or cause to be taken, from the point at which water leaves each treatment works which it uses to supply water to water supply zones, the standard number of samples for analysis—
 - (a) for determining the concentration of residual disinfectant,
 - (b) for determining whether, in relation to the colony counts and turbidity parameters (items 5 and 13 in Schedule 2), water leaving treatment works meets the specifications for those parameters set out in Schedule 2, and
 - (c) for testing for compliance with the prescribed concentrations or values in respect of the coliform bacteria, *E. coli*, and nitrite parameters (in Part II of Table A in Schedule 1 and item 19 in Table B of Schedule 1 respectively) for leaving water treatment works.

F47(2)																
F47(3)																

- (5) Samples required to be taken by this regulation must be taken at regular intervals.
- (6) Where a particular treatment works is in use for part only of a year, the minimum number of samples to be taken from that works in that year must bear to the standard number or, as the case may be, [F48] the number specified in a current notice given by the Secretary of State under regulation 9 which departs from the standard number], the same proportion as the number of days in that year in which the treatment works has been in use bears to 365.
 - [F49(7) In this regulation, "the standard number" has the same meaning as in regulation 9]
 - **F45** Words in reg. 13(1) substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(9)(a)**
 - **F46** Words in reg. 13(1) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(4)**
 - **F47** Reg. 13(2)-(4) omitted (11.7.2018) by virtue of The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(9)(b)**
 - **F48** Words in reg. 13(6) substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), 2(9)(c)
 - **F49** Reg. 13(7) inserted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(9)(d)**

Sampling at service reservoirs

- **14.** Every water undertaker or [F50] wholesale licensee] must take or cause to be taken, from each of its service reservoirs in each week in which the reservoir is in use [F51] or as specified in a notice given by the Secretary of State under regulation 9(3)], one sample for analysis—
 - (a) for testing for compliance with the prescribed concentrations or values in respect of the coliform bacteria and *E. coli* parameters,
 - (b) for determining the concentration of the residual disinfectant, and
 - (c) for determining whether the specification in relation to the colony counts parameter is met.
 - **F50** Words in regs. 14-18 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)
 - **F51** Words in reg. 14 inserted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(10)**

Sampling: new sources

- **15.**—(1) This regulation applies in relation to—
 - (a) any source which has not previously been used for the supply of water by a water undertaker or [F50] wholesale licensee];
 - (b) any source which has been so used but not so used for a period of 6 months preceding the date on which the water undertaker or [F50] wholesale licensee] proposes to supply water from it.
- (2) Every water undertaker or [F50] wholesale licensee] must take or cause to be taken, in accordance with paragraphs (3) and (4), such samples of water as enable it to establish—
 - (a) whether water can be supplied from that source without contravening section 68(1) of the Act F52, and

- (b) the treatment necessary to ensure that section 68(1) of the Act is complied with in relation to the supply of that water.
- (3) The samples must be taken or be caused to be taken—
 - (a) before the water undertaker or [F50wholesale licensee] supplies water from a source mentioned in paragraph (1)(a);
 - (b) as soon as reasonably practicable after it has begun to supply water from a source mentioned in paragraph (1)(b).
- (4) Samples must be taken—
 - (a) in the case of a source mentioned in paragraph (1)(a), in respect of—
 - (i) the parameters listed in Schedules 1 and 2; and
 - (ii) any other element, organism or substance which, in the opinion of the water undertaker or [F50] wholesale licensee] proposing to use the source, may cause the supply to contravene section 68(1) of the Act;
 - (b) in the case of a source mentioned in paragraph (1)(b), in respect of—
 - (i) the parameters listed in Table A in Schedule 1;
 - (ii) the conductivity, hydrogen ion and turbidity parameters; and
 - (iii) any other parameter as regards which the water undertaker or [F50]wholesale licensee]proposing to use the source is of the opinion that its concentration or value is likely to have altered since the last occasion on which water from that source was analysed.
- (5) Unless the conditions in paragraph (6) are satisfied, a water undertaker or [F50]wholesale licensee] must not supply water from a source mentioned in paragraph (1)(a) for regulation 4(1) purposes until 1 month has passed following the day on which the water undertaker or [F50]wholesale licensee] has complied with regulation 28(1) with respect to the source.
 - (6) The conditions are that the water undertaker or [F50] wholesale licensee]—
 - (a) must supply water from the source as a matter of urgency in order to prevent an unexpected interruption in piped supply to consumers, and
 - (b) before the supply is made, has carried out a risk assessment under regulation 27 specifically with respect to that source.
- (7) For the purposes of paragraph (6)(b), regulation 27 applies to supplies made as a matter of urgency as if "treatment works" includes a source from which untreated water is supplied.
 - **F50** Words in regs. 14-18 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)
 - F52 Section 68(1) was amended by paragraph 18 of Schedule 8 to the Water Act 2003 (c.37). It is prospectively amended by paragraph 38 of Schedule 5, and paragraphs 66 and 67 of Schedule 7, to the Water Act 2014 (c.21).

Collection and analysis of samples

- [F5316.—(1) Every water undertaker or wholesale licensee 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 Part 4 or this Part, or causes any such sample to be taken, handled, transported, stored or analysed, it complies with the appropriate requirements.
- (2) Every water undertaker or wholesale licensee must secure that a suitably accredited body checks from time to time its compliance with the appropriate requirements.

- (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 European standard EN ISO/IEC 17025 entitled "General requirements for the competence of testing and calibration laboratories" or other equivalent standards accepted at international level; and
 - (b) that person applies quality management system practices in accordance with European standard EN ISO/IEC 17025 or other equivalent standards accepted at international level.
- (4) Every water undertaker or wholesale 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.
- (5) Subject to paragraph (6), 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 be capable of measuring concentrations equal to the parametric value with a limit of quantification of 30% or less and an uncertainty of measurement as specified in column 2 of that Table and the result must be expressed—
 - (i) using at least the same number of significant figures as the parametric value, and
 - (ii) in the same units laid down in these Regulations; and
 - (c) the method of analysis used for the odour and taste parameters (items 5 and 7 in Part 2 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 or uncertainty of measurement of 1 dilution number at 25°C.
- (6) The Secretary of State may, on the application of any person, authorise a method of analysis other than that specified in paragraph (5)(a) ("the prescribed method").
- (7) An application for the purposes of paragraph (6) 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.
- (8) 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.
- (9) An authorisation under paragraph (6) may be subject to such conditions as the Secretary of State considers appropriate.
- (10) The Secretary of State may at any time, by notice in writing served on the water undertaker or wholesale licensee to which an authorisation under paragraph (6) 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.
- (11) In this regulation, "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 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;
- (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
 - (ii) with the use of such equipment as is suitable for the purpose]
- **F53** Reg. 16 substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(11)** (with reg. 3)

PART 6

Drinking water protected areas

Drinking water abstraction points: monitoring sites

- 17.—(1) Every water undertaker or [F50] wholesale licensee] must identify every point from which it abstracts water for supply for regulation 4(1) purposes.
- (2) At every abstraction point, the relevant water undertaker or [F50] wholesale licensee] must take or cause to be taken such samples, and analyse or cause to be analysed those samples for such properties, organisms and substances as it considers necessary in order to comply with regulations 26 to 28.
- (3) In relation to any abstraction point, the Secretary of State may, by notice served on the relevant water undertaker or [F50] wholesale licensee], require the relevant water undertaker or [F50] wholesale licensee]—
 - (a) to take or cause to be taken such numbers of samples of water per year as may be specified, and
 - (b) to analyse or cause to be analysed those samples for such concentrations or values of such properties, organisms and substances as may be specified and at such frequencies as may be specified.
- (4) The Secretary of State may, by notice served on the relevant undertaker or [F50] wholesale licensee], revoke or vary a notice served under paragraph (3).
 - (5) Every analysis required under—
 - (a) paragraph (2), in relation to every body of surface water which provides more than 100 cubic metres of water per day as an average, must be carried out at no less than the following frequencies—
 - (i) 4 per year, where the population so served by the body of surface water is less than 10,000 people;
 - (ii) 8 per year, where the population so served is from 10,000 to 30,000 people;
 - (iii) 12 per year, where the population so served is greater than 30,000 people;

- (b) paragraphs (2) and (3) must be in accordance with such relevant standards as may be specified by the Secretary of State by notice served on the water undertaker or [F50] wholesale licensee].
- (6) For the purposes of—
 - (a) paragraphs (2) and (3) and this paragraph—
 - "abstraction point" means an abstraction point identified under paragraph (1);
 - "relevant water undertaker or [F50wholesale licensee]" means the water undertaker or [F50wholesale licensee] which identifies the abstraction point;
 - (b) paragraph (3), "specified" means specified in the notice served under that paragraph;
 - (c) paragraph (5), "body of surface water" has the meaning given in Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy F54.
- (7) A notice given under regulation 16A(3) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notice given under paragraph (3) of this regulation.
- (8) A notice given under regulation 16A(5)(b) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notice given under paragraph (5)(b) of this regulation.
 - **F50** Words in regs. 14-18 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)
 - **F54** O.J. No L 327, 22.12.2000, p 1, as last amended by Commission Directive 2014/101/EU (OJ No L 311, 31.10.2014, p 32).

PART 7

Investigations, authorisation of departures and remedial action

Investigations: Schedule 1 parameters

- **18.**—(1) A water undertaker or [F50] wholesale licensee] must immediately take such steps as are necessary to identify the matters specified in paragraph (2) where it has reason to believe that water of a relevant description—
 - (a) fails or is likely to fail to satisfy a requirement of regulation 4(2),
 - (b) is to be regarded as unwholesome by virtue of regulation 4(4), or
 - (c) if regulation 4(6) were ignored, would be regarded as unwholesome by virtue of regulation 4(5).
 - (2) The matters referred to in paragraph (1) are—
 - (a) the cause and extent of the failure or, as the case may be, the apprehended failure;
 - (b) the Schedule 1 parameters in respect of which the prescribed concentration or value has not been or is unlikely to be achieved;
 - (c) in relation to each parameter so identified, whether the failure or apprehended failure to achieve the prescribed concentration or value is attributable—
 - (i) to the domestic distribution system,
 - (ii) to the maintenance of that system, or

- (iii) to neither of those matters.
- (3) Where a departure has been authorised under this Part—
 - (a) paragraph (1) is to apply only in respect of the Schedule 1 parameters (if any) that are not specified in the authorisation;
 - (b) every water undertaker or [F50] wholesale licensee] which has reason to believe that water of a relevant description fails or is likely to fail to satisfy the concentration or value required by the authorisation in relation to any Schedule 1 parameter must immediately take such steps as are necessary to identify the matters specified in paragraph (4).
- (4) The matters referred to in paragraph (3) are—
 - (a) the cause and extent of the failure or, as the case may be, the apprehended failure;
 - (b) the Schedule 1 parameters in respect of which the required concentration or value has not been or is unlikely to be achieved;
 - (c) in relation to each parameter so identified, whether the failure or apprehended failure to achieve that concentration or value is attributable—
 - (i) to the domestic distribution system,
 - (ii) to the maintenance of that system, or
 - (iii) to neither of those matters.
- (5) As soon as possible after the matters specified in paragraph (2) or (4) have been identified, the water undertaker or [F50] wholesale licensee] must—
 - (a) notify the Secretary of State—
 - (i) of those matters;
 - (ii) whether it is its opinion that, in relation to each parameter identified in accordance with paragraph (2)(b) or (4)(b), a failure in respect of that parameter is likely to recur;
 - (iii) of the action (if any) taken by it in relation to a failure which is attributable to the domestic distribution system or the maintenance of that system;
 - (b) send a copy of that notice to any other relevant supplier which uses the supply system for the purposes of supplying water to consumers who are likely to be affected by the failure.
- (6) Where the water undertaker or [F50] wholesale licensee] has identified a failure attributable to the domestic distribution system or the maintenance of that system, it must by notice in writing, at the same time as notification is given under paragraph (5), inform any person referred to in paragraph (7) of the nature of the failure and provide details of the steps (if any) that, in its opinion, it is necessary or desirable for those consumers to take in the interests of their health.
 - (7) The persons that must be informed in accordance with paragraph (6) are—
 - (a) those of its consumers who are likely to be affected by the failure, and
 - (b) any other relevant supplier which uses the supply system for the purposes of supplying water to consumers who are likely to be affected by the failure.
- (8) Where a notice is sent in accordance with paragraph (6), a copy of that notice must be sent to the Secretary of State and to each local authority whose area is likely to be affected by the failure.
- (9) A relevant supplier which receives a notice under paragraph (6) must immediately send or cause to be sent a copy of that notice to those of its consumers who are likely to be affected by the failure.
- (10) A water undertaker or [F50] wholesale licensee] which has complied with the requirements of paragraphs (5) and (6) need not, in respect of the same failure or apprehended failure, comply with the requirements of regulation 35(6)(a)(iv).

(11) Where such a failure as is mentioned in paragraph (1) relates to the copper or lead parameters (item 10 and 15 in Part I of Table B in Schedule 1), the relevant supplier must, as soon as is reasonably practicable after the occurrence, modify or replace such of its pipes and their associated fittings as it knows or has reason to believe have the potential for contributing to copper or lead in the water supplied to the premises, so as to eliminate that potential (whether or not the presence of copper or lead in those pipes contributed to the failure).

F50 Words in regs. 14-18 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)

Investigations: indicator parameters

- **19.**—(1) Where a water undertaker or [F55] wholesale licensee] has reason to believe that water of a relevant description does not meet the specifications for indicator parameters set out in Schedule 2, it must immediately take such steps as are necessary to identify—
 - (a) the reason why the specifications are not met;
 - (b) the indicator parameters in respect of which the specifications are not met;
 - (c) if the specification for the coliform bacteria or colony counts parameter (items 4 and 5 in Schedule 2) is not met, whether the inability to meet that specification is attributable—
 - (i) to the domestic distribution system,
 - (ii) to the maintenance of that system, or
 - (iii) to neither of those matters;
 - (d) if the specification for the tritium parameter is not met, whether the inability to meet the specification is attributable to artificial radionuclides.
- (2) As soon possible after the matters specified in paragraph (1) have been identified, the water undertaker or [F56] wholesale licensee] must—
 - (a) notify the Secretary of State—
 - (i) of those matters;
 - (ii) whether it is its opinion that, in relation to each parameter identified in accordance with paragraph (1)(b), a recurrence of the inability to meet the specification in respect of that parameter is likely;
 - (b) send a copy of that notice to any other relevant supplier which uses the supply system for the purposes of supplying water to consumers who are likely to be affected by the failure.
- (3) Where, in a case to which paragraph (1)(c) applies, the inability to meet the specification has been attributable to the domestic distribution system or to the maintenance of that system, the water undertaker or [F57] water supply licensee] must, at the same time as notification is given under paragraph (2)—
 - (a) by notice in writing to any person referred to in paragraph (4), inform them of the nature of the failure and provide details of the steps (if any) that, in its opinion, it is necessary or desirable for those consumers to take in the interests of their health;
 - (b) send a copy of that notice to the Secretary of State and to each local authority whose area is likely to be affected by the failure.
 - (4) The persons referred to in paragraph (3)(a) are—
 - (a) those of its consumers who are likely to be affected by the failure, and
 - (b) any other relevant supplier which uses the supply system for the purposes of supplying water to consumers who are likely to be affected by the failure.

- (5) A relevant supplier which receives a notice under paragraph (3)(a) must immediately send or cause to be sent a copy of that notice to those of its consumers who are likely to be affected by the failure.
 - F55 Words in reg. 19(1) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(4)**
 - **F56** Words in reg. 19(2) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)
 - F57 Words in reg. 19(3) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(2)

Action by the Secretary of State

20.—(1) Where—

- (a) a notification given in accordance with paragraph (5) of regulation 18 in the circumstances mentioned in paragraph (1) of that regulation (including that paragraph as read with paragraph (3)(a) of that regulation) discloses—
 - (i) a failure in respect of a parameter specified in Table B in Schedule 1, and
 - (ii) that the failure is not attributable to the domestic distribution system or the maintenance of that system, and
- (b) it appears to the Secretary of State that the failure is not trivial and is likely to recur,

the Secretary of State may, by notice in writing to any relevant supplier which uses the supply system for the purposes of supplying water to consumers in respect of which the notification was given, require that relevant supplier to seek a departure from the provisions of Part 3 in accordance with regulation 22.

- (2) The exercise by the Secretary of State of the power conferred by paragraph (1) does not preclude the exercise by the Secretary of State of the power conferred by section 18 of the Act ^{F58}.
 - (3) Where—
 - (a) a notification given in accordance with regulation 18(5) in the circumstances mentioned in regulation 18(3)(b) discloses—
 - (i) a failure in relation to any parameter specified in Table B in Schedule 1, and
 - (ii) that the failure is not attributable to the domestic distribution systems or the maintenance of that system, and
 - (b) it appears to the Secretary of State that the failure in respect of that parameter is not trivial and likely to recur,

the Secretary of State must consider whether to vary the terms of the authorisation under regulation 22.

- (4) Where—
 - (a) a notification given in accordance with regulation 19(2) discloses an inability to meet the specification applicable to an indicator parameter, and
- (b) the Secretary of State considers that the inability poses a potential danger to human health, the Secretary of State must, by notice in writing to any relevant supplier which uses the supply system for the purposes of supplying water to consumers in respect of which the notification was given, require that relevant supplier to take such steps as may be determined by the Secretary of State and specified in the notice.

- (5) A relevant supplier to whom a notice under paragraph (4) has been given must take the steps specified in the notice.
 - (6) On the coming into force of these Regulations—
 - (a) a notice given under regulation 19(1) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notice given under paragraph (1) of this regulation;
 - (b) a notice given under regulation 19(4) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notice given under paragraph (4) of this regulation.
 - F58 Section 18 was amended by sections 36(2) and 49(2) of, and paragraph 4 of Schedule 8 to, the Water Act 2003 (c.37). It is prospectively amended by paragraph 26 of Schedule 7 to the Water Act 2014 (c.21) from a date to be appointed.

Failure attributable to domestic distribution system where water is supplied to the public

- **21.**—(1) Paragraph (3) applies where the Secretary of State considers that the failure (or, in the case of regulation 18, apprehended failure) disclosed by a notification under regulation 18(5) or regulation 19(2)—
 - (a) is attributable to the domestic distribution system, or the maintenance of that system, in premises where water supplied for regulation 4(1) purposes is made available for members of the public, including schools within the meaning of the Education Act 1996 ^{F59}, hospitals and restaurants.
 - (b) is not trivial and is likely to recur, and
 - (c) in the cases of a notification given under regulation 19(2), poses a potential danger to human health.
- (2) References in this regulation to "failure" are references to a failure or apprehended failure of the type referred to in paragraph (1).
 - (3) Subject to paragraph (7), the Secretary of State must serve a notice in writing on—
 - (a) the water undertaker that supplies water to the premises, or
 - (b) the water undertaker whose supply system is used for the purpose of a [^{F60}water supply licensee] making a supply of water to the premises,

requiring it to exercise the power conferred by section 75(2) of the Act in respect of the failure.

- (4) The provisions of section 75(2) to (12) of the Act ^{F61} apply in relation to the exercise of the power in section 75(2) in pursuance of a notice served under paragraph (3), subject to the modifications in paragraph (5).
 - (5) Those modifications are—
 - (a) subsections (2)(b) and (4) are to be read as if any reference to "damage, contamination, waste, misuse or undue consumption" were a reference to the failure;
 - (b) subsection (9) is to be read as if, for the opening words to the end of paragraph (b), there were substituted—
 - "(9) Where, in a case not falling within subsection (7)(a) or (b) above, any steps specified in a notice served by a water undertaker for the purposes of subsection (2)(b) above have not been taken by the end of the period so specified, the water undertaker—
 - (a) must take those steps itself; and

- (b) subject to subsection (10) below may recover any expenses reasonably incurred by the undertaker in taking those steps from the person on whom the notice was served;".
- (6) Where the water undertaker exercises the power in section 75(2) of the Act pursuant to a notice served by the Secretary of State under paragraph (3), it must inform by notice in writing any of its other consumers who are likely to be affected of the steps it has taken, and such notice must include a copy of any notice that it has served.
- (7) Where the Secretary of State considers that the failure (or any aspect of it) is attributable to factors arising from the further distribution by a person other than a water undertaker or [F60] water supply licensee]—
 - (a) the Secretary of State must not serve a notice under paragraph (3) in respect of that failure or aspect of it;
 - (b) if the Secretary of State considers that the local authority needs information or assistance from the water undertaker or [F60] water supply licensee] in order to be able to carry out its duties under regulation 15 or 16 of the Private Water Supplies (England) Regulations 2016 F62, the Secretary of State must serve a notice on the water undertaker or [F60] water supply licensee] requiring it to provide such information or assistance to the local authority as is specified in the notice.
- (8) The water undertaker or [^{F60}water supply licensee] on which a notice under this regulation has been served must take the steps specified in the notice.
- (9) On the coming into force of these Regulations, a notice given under regulation 19A(3) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notice given under paragraph (3) of this regulation.
 - **F59** 1996 c.56.
 - **F60** Words in reg. 21 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(2)
 - F61 Section 75 was amended by paragraph 24 of Schedule 8 to the Water Act 2003 and paragraph 72 of Schedule 7 to the Water Act 2014.
 - **F62** S.I. 2016/573.

Authorisation of temporary supply of water that is not wholesome

- **22.**—(1) The Secretary of State may, upon the written application of a relevant supplier, authorise in accordance with regulation 23 a departure from the provisions of Part 3 insofar as they relate to—
 - (a) a parameter specified in Table B in Schedule 1, and
 - (b) the supply of water by a relevant supplier in any of the water supply zones which it uses for the purposes of supplying water to consumers.
- (2) But the Secretary of State must not authorise a departure under paragraph (1) unless the Secretary of State is satisfied that—
 - (a) the authorisation is necessary to maintain in that zone a supply of water for regulation 4(1) purposes,
 - (b) a supply of water for those purposes cannot be maintained in that zone by any other reasonable means, and
 - (c) the supply of water in accordance with the authorisation does not constitute a potential danger to human health.
 - (3) Every water undertaker or [F63wholesale licensee] must provide with its application—

(a) a statement—

- (i) of the grounds on which the authorisation is sought;
- (ii) of the water supply zone in respect of which the authorisation is sought;
- (iii) of the parameters in respect of which the prescribed concentration or value cannot be met:
- (iv) in respect of each parameter to which paragraph (iii) applies, of the results of the analysis of the samples taken in the water supply zone in question during the 12 months immediately preceding the first day on which the prescribed concentration or value could not be met;
- (v) in respect of each parameter to which paragraph (iii) applies, of the results of the analysis of the samples (if any) taken in the water supply zone in question between the first day on which the prescribed concentration or value could not be met and the date of the application;
- (vi) of the average daily quantity of water supplied to that zone or, if that quantity cannot readily be ascertained, of the average daily quantity of water supplied from the treatment works that supplies water to that zone;
- (vii) of the estimated population of that zone;
- (viii) as to whether, if a departure were authorised in the terms sought, any relevant food production undertaking would be affected;
- (ix) of the period for which the authorisation is sought;
- (x) of the reasons why the supply cannot be maintained by other reasonable means;
- (b) a scheme for monitoring the quality of water supplied in the zone during the period for which the authorisation is sought;
- (c) a summary of the steps that it proposes to take, either alone or together with other relevant suppliers, in order to secure that the supply fully satisfies the requirements of Part 3, including—
 - (i) a timetable for the work;
 - (ii) an estimate of the cost of the work;
 - (iii) provisions for reviewing the progress of the work and for reporting the results of the review to the Secretary of State.
- (4) At the same time as it makes an application for an authorisation under paragraph (1), the water undertaker or [^{F64}wholesale licensee] must serve a copy of the application and of the statement, scheme and summary referred to in paragraph (3) on—
 - (a) every appropriate local authority;
 - (b) Public Health England;
 - (c) where the water supply zone is wholly or partly in Wales, the National Public Health Service for Wales;
 - (d) the Council F65.
- (5) A body on whom documents have been served in accordance with paragraph (4) may make representations to the Secretary of State in connection with the application.
- (6) Representations under paragraph (5) must be made within 30 days beginning with the date on which the application for the authorisation is made.
- (7) On the coming into force of these Regulations, an authorisation given under regulation 20(1) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be an authorisation given under paragraph (1) of this regulation.

- **F63** Words in reg. 22(3) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(4)**
- **F64** Words in reg. 22(4) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(4)**
- F65 Section 219(1) of the Act defines "the Council" as the Consumer Council for Water.

Authorisations: terms and conditions

- **23.**—(1) A departure may be authorised under regulation 22 for such period as is in the Secretary of State's opinion reasonably required for securing a supply of water for regulation 4(1) purposes that fully satisfies the requirements of Part 3 ("the departure period").
 - (2) But no departure period may exceed 3 years.
 - (3) Subject to paragraph (5), an authorisation under regulation 22—
 - (a) must specify—
 - (i) the grounds on which it is granted;
 - (ii) every water supply zone in respect of which it is granted;
 - (iii) the extent to which a departure from the prescribed concentration or value of any parameter is authorised;
 - (iv) in respect of each parameter to which paragraph (iii) applies, the results of the analysis of the samples taken in each water supply zone in question during the 12 months immediately preceding the first day on which the prescribed concentration of value could not be met;
 - (v) in respect of each parameter to which paragraph (iii) applies, the results of the analysis of the samples (if any) taken in each water supply zone in question between the first day on which the prescribed concentration or value could not be met and the date of the application;
 - (vi) the average daily quantity of water supplied from each of those zones or, if that quantity cannot readily be ascertained, the average daily quantity of water supplied from the treatment works that supplies water to that zone;
 - (vii) the estimated population of each of those zones;
 - (viii) whether or not any relevant food production undertaking would be affected;
 - (ix) the departure period;
 - (b) is to require the implementation of a scheme for monitoring the quality of water supplied in each of those zones during the departure period (which may be, but need not be, the scheme submitted in accordance with regulation 22(3)(b));
 - (c) is to require the carrying out of the steps which, in the relevant supplier's opinion, are reasonably required in order to secure that the supply fully satisfies the requirements of Part 3 (whether or not the steps are those proposed in the summary submitted in accordance with regulation 22(3)(c));
 - (d) is to specify in relation to those steps—
 - (i) the timetable for the work;
 - (ii) an estimate of the cost of the work;
 - (iii) provisions for reviewing the progress of the work and for reporting to the Secretary of State the result of the review;

- (e) is to require a relevant supplier to provide to the relevant population advice as to the measures (if any) that it would be advisable for them to take in the interests of their health for the whole or any part of the departure period.
- (4) In paragraph (3)(e), "relevant population" means the population within the water supply zones to which the authorisation applies and, in particular, those groups of that population for which the supply of water in accordance with the authorisation could present a special risk.
- (5) Where paragraph (6) applies, the particulars to be specified in the authorisation are those required by paragraph (3)(a)(iii) and (ix), and paragraph (3)(b) to (e) does not apply.
 - (6) This paragraph applies where the Secretary of State is of the opinion that—
 - (a) the extent of the contravention of the requirements of Part 3 as respects any parameter is trivial, and
 - (b) the prescribed concentration or value as respects that parameter is likely to be achieved within the period of 30 days beginning with the day on which the prescribed concentration or value in respect of that parameter was contravened.
- (7) Where it appears to the Secretary of State that a supply of water that fully satisfies the requirements of Part 3 cannot be restored by the end of the departure period, the Secretary of State may authorise a [F66 further two departures].
- (8) Paragraphs (1) to (6) apply to a further departure authorised under paragraph (7) as they apply to a departure authorised under regulation 22.

$^{F67}(9)$.																
F67(10)																

- (11) An authorisation under regulation 22 or this regulation may be limited to water supplied—
 - (a) from particular sources or classes of source;
 - (b) to particular water supply zones or to zones of particular descriptions.
- (12) On the coming into force of these Regulations, any further authorisations given under regulation 21(5) and (7) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations are taken to be further authorisations given under paragraph (7) $^{\text{F68}}$... of this regulation.
 - **F66** Words in reg. 23(7) substituted (31.12.2020) by The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/558), regs. 1(1), **18(5)(a)**; 2020 c. 1, Sch. 5 para. 1(1)
 - **F67** Reg. 23(9)(10) omitted (31.12.2020) by virtue of The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/558), regs. 1(1), **18(5)(b)**; 2020 c. 1, Sch. 5 para. 1(1)
 - **F68** Words in reg. 23(12) omitted (31.12.2020) by virtue of The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/558), regs. 1(1), **18(5)(c)**; 2020 c. 1, Sch. 5 para. 1(1)

Publicity for authorisations

- **24.**—(1) As soon as reasonably practicable after a departure has been authorised under regulation 22 or 23, the specified relevant suppliers must—
 - (a) separately publish by making accessible, free of charge, on their websites via a hyperlink maintained on their respective homepages for at least 14 days—
 - (i) except in a case to which paragraph (5) of regulation 23 applies, a notice containing a statement of the matters specified in paragraph (3)(a)(ii), (iii), (viii) and (ix) of that regulation;

- (ii) in a case to which paragraph (5) of regulation 23 applies, a notice containing a statement of the matters specified in paragraph (3)(a)(ii), (iii) and (ix) of that regulation;
- (b) jointly give such other public notice of the authorisation and of its terms and conditions as the Secretary of State may, by notice served on the specified relevant supplies, reasonably require.
- (2) In paragraph (1), "specified relevant suppliers" means relevant suppliers who—
 - (a) use the same water supply zone for the purposes of supplying water to consumers, and
 - (b) for the purposes of that supply, rely on an authorised departure relating to the same facts.

Revocation and variation of authorisations

- **25.**—(1) Subject to paragraphs (2) and (4), the Secretary of State may at any time revoke or vary an authorisation under regulation 22.
- (2) Subject to paragraph (3) the Secretary of State is not to revoke or modify an authorisation under regulation 22 without giving at least 6 months' notice in writing of the Secretary of State's intention to do so to—
 - (a) the relevant supplier to which the authorisation relates;
 - (b) any other relevant supplier which, for the purposes of supplying water to consumers, uses the water supply zone in respect of which the authorised departure has been given;
 - (c) every appropriate local authority;
 - (d) Public Health England;
 - (e) where the authorisation relates to a water supply zone which is wholly or partly in Wales, the National Public Health Service for Wales;
 - (f) the Council.
- (3) The Secretary of State may revoke or vary an authorisation under regulation 22 without notice if it appears to the Secretary of State that immediate revocation or modification is required in the interests of public health.
- (4) A relevant supplier on whose application a departure has been authorised under regulation 22 must notify the Secretary of State as soon as the circumstances which gave rise to the application cease to exist, and the Secretary of State must revoke the authorisation without the need for prior notice.
- (5) In this regulation, "an authorisation under regulation 22" includes an authorisation for a further or third departure under regulation 23.

PART 8

Water treatment

Disinfection and other treatment arrangements

- **26.**—(1) Unless the conditions in paragraph (5) are satisfied, before supplying water for regulation 4(1) purposes, a water undertaker or [F69] wholesale licensee] must—
 - (a) disinfect the water, and
 - (b) where necessary, subject the water to sufficient preliminary treatment to prepare it for disinfection.

- (2) A water undertaker or [F70 water supply licensee] supplier must—
 - (a) design, operate and maintain the disinfection process so as to keep disinfection by-products as low as possible without compromising the effectiveness of the disinfection, and
 - (b) verify the effectiveness of the disinfection process.
- (3) Paragraph (4) applies when any property, organism or substance is present in a water source at a level that may constitute a potential danger to human health
- (4) Unless the conditions in paragraph (5) are satisfied, before supplying water for regulation 4(1) purposes using water from any source, a water undertaker or [F69] wholesale licensee] must design and continuously operate an adequate treatment process for water from the source.
 - (5) The conditions are that the water undertaker or [F69] wholesale licensee]—
 - (a) must supply water from the treatment works as a matter of urgency in order to prevent an unexpected interruption in piped supply to consumers, and
 - (b) before the supply is made, has taken all necessary steps to inform consumers that the water is not disinfected or adequately treated.
 - (6) For the purposes of this regulation—
 - (a) "adequate treatment process" means a process of blending or purification treatment which removes or renders harmless the concentration or value of any property of water, or organism or substance in water, so that supplies do not constitute a potential danger to human health;
 - (b) "sufficient preliminary treatment" means the treatment necessary—
 - (i) to remove, or to reduce the concentration or value of, any property or substance which would interfere with disinfection, and
 - (ii) to reduce turbidity to less than 1 NTU;
 - (c) water is supplied for regulation 4(1) purposes when it leaves a treatment works.
 - **F69** Words in regs. 26-28 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)
 - **F70** Words in reg. 26(2) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(2)**

Risk assessment

- **27.**—(1) This regulation applies to every treatment works and supply system from which water is supplied for regulation 4(1) purposes.
- (2) Every water undertaker or [F69]wholesale licensee] must carry out a risk assessment of each of its treatment works and connected supply system in order to establish whether there is a significant risk of supplying water from those works or supply system that could constitute a potential danger to human health or is likely to be unwholesome.
- (3) Every water undertaker or [F69wholesale licensee] must keep its risk assessments under continuous review.
- (4) The Secretary of State may by notice served on a water undertaker or [^{F69}wholesale licensee] require a risk assessment or review to be carried out by a date specified in the notice.
- (5) Where a water undertaker or [^{F69}wholesale licensee] becomes aware of any factors which make it likely that a risk assessment under this regulation would establish that there is a significant risk of supplying water that would constitute a potential danger to human health or that is likely to be unwholesome, it must notify the Secretary of State specifying the relevant factors.

- (6) On the coming into force of these Regulations, a notice given under regulation 27(5) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notice given under paragraph (4) of this regulation.
 - **F69** Words in regs. 26-28 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)

Procedure following risk assessment and prohibition of supply

- **28.**—(1) As soon as reasonably practicable after a water undertaker or [^{F69}wholesale licensee] has carried out a risk assessment or review of such assessment under regulation 27, it must submit to the Secretary of State a report of the assessment or review.
 - (2) The report must contain—
 - (a) a description of the methods used to carry out the assessment or review;
 - (b) where the assessment or review establishes that there is no significant risk of supplying water that could constitute a potential danger to human health or could be unwholesome, a statement confirming this;
 - (c) where the assessment or review establishes that measures have been taken to remove a significant risk of supplying water that could constitute a potential danger to human health or be unwholesome—
 - (i) monitoring data which verifies this;
 - (ii) details of those measures.
- (3) Where the assessment or review establishes that there is a significant risk of supplying water that could constitute a potential danger to human health or could be unwholesome, the report must—
 - (a) contain a full explanation including details of every property, organism or substance that has been identified as contributing to the risk;
 - (b) specify the measures to mitigate the risk that the water undertaker or $[^{F69}]$ wholesale licensee]—
 - (i) has made operational as at the date of the report, and
 - (ii) intends to make operational.
- (4) Where the Secretary of State has received a report which states that there is or has been a significant risk of supplying water that could constitute a potential danger to human health or could be unwholesome, the Secretary of State may, by notice served on the water undertaker or [F69] wholesale licensee], require the water undertaker or [F69] wholesale licensee].
 - (a) to maintain such specified measures for such period of time as the Secretary of State considers appropriate to mitigate the risk;
 - (b) to review, revise or make operational such specified measures by such date as the Secretary of State considers appropriate to mitigate the risk;
 - (c) to audit whether the measures have been effective by such means as may be specified;
 - (d) not to supply water for regulation 4(1) purposes from specified treatment works or supply systems, or not to so supply unless specified conditions are satisfied;
 - (e) to give the Secretary of State such information as the Secretary of State may require to monitor progress towards mitigation of that risk.
 - (5) In paragraph (4), "specified" means specified in the notice served under that paragraph.

- (6) The Secretary of State may, by notice served on the relevant undertaker or [F71] water supply licensee], revoke or vary a notice served under paragraph (4).
- (7) On the coming into force of these Regulations, a notice given under regulation 28(4) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notice given under paragraph (4) of this regulation.
 - **F69** Words in regs. 26-28 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)
 - F71 Words in reg. 28(6) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(2)

Water treatment to minimise contamination from pipes

- **29.**—(1) Paragraph (2) applies where there is a risk ("the prescribed risk") that water supplied by a relevant supplier would, for the reason mentioned in paragraph (3), after leaving the relevant supplier's pipes—
 - (a) contain a concentration of copper in excess of 2mg/litre, or
 - (b) contain a concentration of lead in excess of $10\mu g/litre$.
- (2) Every water undertaker or [^{F72}wholesale licensee] which introduces water into the supply system used by the relevant supplier must, subject to paragraph (4), treat the water in such a way as will, in its opinion, eliminate the prescribed risk or reduce it to a minimum.
- (3) The reason referred to in paragraph (1) is the presence in the water of a concentration of copper or lead which is attributable to the fact that copper or lead is the major component of such a pipe as is mentioned in section 68(3) of the Act ^{F73}, or its associated fittings.
 - (4) Paragraph (1) does not require a water undertaker or [F74wholesale licensee] to treat water if—
 - (a) the treatment is unlikely to achieve a significant reduction in the concentration of copper or lead, or
 - (b) treatment is not reasonably practicable.
 - **F72** Words in reg. 29(2) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(4)**
 - F73 Section 68(3) was amended by paragraph 18(5) of Schedule 8 to the Water Act 2003 (c.37).
 - Words in reg. 29(4) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), **32(4)**

Replacement of lead pipes

- **30.**—(1) The relevant supplier must modify or replace its part of the pipe where a relevant supplier—
 - (a) has received from the owner of premises to which water is so supplied notice in writing of—
 - (i) the owner's intention to replace so much of the pipe as belongs to him, and
 - (ii) the owner's desire that the relevant supplier replaces the remainder of the pipe, and
 - (b) has reason to believe that water supplied by it for regulation 4(1) purposes from a pipe to which paragraph (2) applies contains, or is likely to contain, at the consumer's tap, a concentration of lead which exceeds 10μg/litre.
 - (2) This paragraph applies to a pipe—

- (a) of which the major component is lead,
- (b) which is subject to water pressure from a water main or would be so subject but for the closing of some valve, and
- (c) of which part belongs to a relevant supplier and of which the remainder belongs to the owner of any premises to which the relevant supplier supplies water for regulation 4(1) purposes.

Application and introduction of substances and products

- **31.**—(1) Subject to paragraph (2), a water undertaker or [F75] wholesale licensee] must not apply any substance or product to, or introduce any substance or product into, water which is to be supplied for regulation 4(1) purposes, unless one of the requirements of paragraph (4) is satisfied.
 - (2) A substance or product which, at the time of its application or introduction— $^{F76}(a)$
 - (b) conforms to an appropriate British Standard or some other appropriate standard F77... which provides an equivalent level of protection and performance,

may be applied or introduced, notwithstanding that none of the requirements of paragraph (4) is satisfied.

- (3) Paragraph (2) applies only if such an application or introduction complies with—
 - (a) such conditions of use restricting the dosing concentration as are for the time being in force in relation to such substances and products pursuant to a determination of the Secretary of State by an instrument in writing;

^{F78} (b)

- (4) The requirements of this paragraph are that—
 - (a) the Secretary of State has for the time being approved the application or introduction of that substance or product and it is applied or introduced in accordance with any conditions attaching to that approval;
 - (b) the Secretary of State is satisfied that the application or introduction of the substance or product either alone or in combination with any other substance or product in the water is unlikely to adversely affect the quality of the water supplied;
 - (c) the substance or product is to be applied or introduced solely for the purposes of testing or research, and the water undertaker or [F75] wholesale licensee] has given to the Secretary of State not less than 3 months' notice in writing of its intention so to apply or introduce the substance or product.
- (5) An application for an approval mentioned in paragraph 4(a) may be made by any person.
- (6) If the Secretary of State decides to issue an approval under paragraph 4(a), the Secretary of State may include in the approval such conditions as the Secretary of State considers appropriate and, in accordance with paragraph (10), may at any time revoke or vary any approval that the Secretary of State has previously given.
- (7) Where substances or products are applied or introduced in any case in which the requirement mentioned in paragraph (4)(c) is satisfied, their application or introduction must be discontinued within 12 months of the date on which they were first applied or introduced or, if the Secretary of State by notice given in writing to the water undertaker or [F75] wholesale licensee] so directs, within such other period (whether longer or shorter) as may be specified in the notice.
- (8) The Secretary of State may, by notice given in writing to any water undertaker or [F75] wholesale licensee], prohibit it from applying to, or introducing into, water intended to be supplied for

regulation 4(1) purposes any substance or product which the water undertaker or licensee would otherwise be authorised to apply or introduce by virtue of—

- (a) paragraphs (1) and (4)(b) or (c), or
- (b) paragraph (2).
- (9) A prohibition under paragraph (8) may be without limitation as to time or for such period as is specified in the notice.
 - (10) Subject to paragraph (11), the Secretary of State may—
 - (a) revoke by an instrument in writing any approval given by him under paragraph (4)(a);
 - (b) vary any such approval by an instrument in writing by including conditions or varying existing conditions;
 - (c) give any such notice as is mentioned in paragraph (8).
- (11) Unless the Secretary of State is satisfied that it is necessary to do so in the interests of public health without notice, the Secretary of State must not act under paragraph (10) without giving all such persons as are, in the Secretary of State's opinion, likely to be affected by the revocation or variation of the approval or by the giving of the notice, at least 6 months' notice in writing.
- (12) Notwithstanding paragraph (11), the Secretary of State must give immediate notice to all persons likely to be affected by the revocation or variation of an instrument mentioned in paragraph (10)(a) or (b).
- (13) At least once in each year the Secretary of State must issue a list of all the substances and products, with particulars of the action taken, in relation to which—
 - (a) an approval under paragraph 4(a) has been granted or refused;
 - (b) such an approval has been revoked or varied;
 - (c) a notice has been given under paragraph (8).
 - (14) The Secretary of State may—
 - (a) by notice served on the person who makes an application for approval under paragraph (4) (a), require the person to pay the Secretary of State a charge which reflects the administrative expenses incurred or likely to be incurred by the Secretary of State in connection with the application;
 - (b) in determining the amount of any such charge, adopt such methods and principles for its calculation as appear to the Secretary of State to be appropriate.

- (16) On the coming into force of these Regulations—
 - (a) an approval given under regulation 31(4)(a) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notice given under paragraph (4)(a) of this regulation;
 - (b) a notice given under regulation 31(7) or (8) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notice given under paragraph (7) or (8) respectively of this regulation.
- **F75** Words in regs. 31-34 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)
- F76 Reg. 31(2)(a) omitted (31.12.2020) by virtue of The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/558), regs. 1(1), 18(6)(a); 2020 c. 1, Sch. 5 para. 1(1)
- F77 Words in reg. 31(2)(b) omitted (31.12.2020) by virtue of The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/558), regs. 1(1), **18(6)(b)**; 2020 c. 1, Sch. 5 para. 1(1)

- **F78** Reg. 31(3)(b) omitted (31.12.2020) by virtue of The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/558), regs. 1(1), **18(6)(c)**; 2020 c. 1, Sch. 5 para. 1(1)
- F79 Reg. 31(15) omitted (31.12.2020) by virtue of The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/558), regs. 1(1), **18(6)(d)**; 2020 c. 1, Sch. 5 para. 1(1)

Use of processes

- **32.**—(1) The Secretary of State may at any time, by notice in writing given to a water undertaker or [F75] wholesale licensee], require it to make an application to the Secretary of State for approval of the use of any process, and may prohibit it for such period as may be specified in the notice from using any such process in connection with the supply by it of water for regulation 4(1) purposes.
- (2) The Secretary of State may refuse the application or impose on any approval given for the purposes of this regulation such conditions as the Secretary of State thinks fit and, subject to paragraph (3), may at any time by notice in writing to the water undertaker or [F75] wholesale licensee] revoke an approval so given, or revoke or vary any condition imposed by virtue of this paragraph.
- (3) Subject to paragraph (4), unless the Secretary of State has given to the water undertaker or [F75] wholesale licensee] at least 6 months' notice in writing of the Secretary of State's intention to revoke, vary or prohibit, as the case may be, the Secretary of State must not—
 - (a) revoke any approval given for the purposes of this regulation;
 - (b) vary any condition imposed by virtue of paragraph (2);
 - (c) prohibit a water undertaker or [F75] wholesale licensee] from using any process.
- (4) Paragraph (3) does not apply in any case in which the Secretary of State is of the opinion that the immediate revocation, modification or prohibition is necessary in the interests of public health.
 - (5) Regulation 31(13) applies for the purposes of this regulation, to be read as if—
 - (a) for the reference to substances or products there were substituted a reference to processes;
 - (b) for the reference to paragraph (4)(a) there were substituted a reference to this regulation; and
 - (c) for the reference to paragraph (8) there were substituted a reference to paragraph (1) of this regulation.
 - (6) On the coming into force of these Regulations—
 - (a) a notice given under regulation 32(1) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be a notice given under paragraph (1) of this regulation;
 - (b) an approval given under regulation 32(2) of the 2000 Regulations which had effect immediately before the coming into force of these Regulations is taken to be an approval given under paragraph (2) of this regulation.

F75 Words in regs. 31-34 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)

Offences

33.—(1) A water undertaker or [F75] wholesale licensee] which contravenes regulation 26(1) or (4) or the terms of a notice served under regulation 28(4)(d) is guilty of an offence and liable on summary conviction, or on conviction on indictment, to a fine.

- (2) In any proceedings against a water undertaker or [F75] wholesale licensee] for an offence under paragraph (1), it is a defence for that water undertaker or [F75] wholesale licensee] to show that it took all reasonable steps and exercised all due diligence to avoid the commission of the offence.
 - (3) A water undertaker or [F75wholesale licensee] which—
 - (a) applies or introduces any substance or product in contravention of regulation 31(1) or a notice given under regulation 31(8), or
 - (b) uses any process in contravention of a prohibition imposed under regulation 32(1) or without complying with a condition imposed by virtue of regulation 32(2),

is guilty of an offence and liable on summary conviction, or on conviction on indictment, to a fine.

- (4) If any person, in furnishing any information or making an application under regulation 31 or 32, makes any statement which that person knows to be false in a material particular, or recklessly makes any statement which is false in a material particular, that person is guilty of an offence and liable on summary conviction, or on conviction on indictment, to a fine.
- (5) Proceedings for an offence under paragraph (4) must not be instituted except by or with the consent of the Secretary of State or the Director of Public Prosecutions.

F75 Words in regs. 31-34 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)

PART 9

Records and information

Maintenance of records

- **34.**—(1) Every water undertaker or [F75] wholesale licensee] must, in respect of each of the water supply zones which it uses for the purposes of supplying water to consumers, prepare and maintain a record containing—
 - (a) the name of the zone;
 - (b) the name of every water treatment works, service reservoir and other supply point from which water is supplied to premises within the zone;
 - (c) an estimate of the population of the zone;
 - (d) particulars of any departure authorised under Part 7 of these Regulations which applies to water supplied in the zone;
 - (e) particulars of the action taken or required to be taken by the water undertaker or [F80] water supply licensee] to comply with—
 - (i) any enforcement order made under section 18 of the Act F81;
 - (ii) any departure authorised under Part 7;
 - (iii) any notice under regulation 20(4);
 - (f) particulars of the result of any analysis of samples taken in accordance with Part 4 of these Regulations or any of regulations 12 to 14, 17 and 28;
 - (g) the results of any electronic monitoring where this is carried out in accordance with these Regulations;

- (h) particulars of all consumer contacts ^{F82}... in relation to the discharge of duties under these Regulations;
- (i) such other particulars as the water undertaker or [F80water supply licensee] may determine.
- (2) A retail licensee must, in respect of each of the water supply zones which it uses for the purposes of supplying to consumers, prepare and maintain a record containing—
 - (a) the name of the water supply zone;
 - (b) particulars of any departure authorised under Part 7 of these Regulations which applies to water supplied in the zone;
 - (c) particulars of the action taken or required to be taken by the retail licensee to comply with—
 - (i) any enforcement order made under section 18 of the Act;
 - (ii) any departure authorised under Part 7;
 - (iii) any notice under regulation 20(4);
 - [F83(ca) particulars of all consumer contacts F84... in relation to the discharge of duties under these Regulations;]
 - (d) such other particulars as the retail licensee may determine.
 - (3) A water undertaker or [F75wholesale licensee] must make entries in the record
 - (a) in respect of the matters mentioned in paragraph (1)(a) to (d) and (e)(ii), as soon as reasonably practicable and no later than 3 months after the day on which it first introduces water into a supply system for the purposes of supplying water to consumers;
 - (b) in respect of the matters mentioned in paragraph (1)(e)(i) and (iii), within 28 days of the date of the order and notice respectively;
 - (c) relating to the results of the analysis of samples, within 28 days of the day on which the result is first known to the water undertaker or [F75] wholesale licensee].
 - (4) A retail licensee must make—
 - (a) initial entries in the record in respect of the matters mentioned in paragraph (2)(a), (b) and (c)(ii) no later than 3 months after the day on which it first uses a supply system for the purposes of supplying water to consumers;
 - (b) entries in the record in respect of the matters mentioned in paragraph (2)(c)(i) and (iii) within 28 days of the date of the order and notice respectively.
- (5) Without prejudice to paragraph (3), the relevant supplier must at least once in each year review and update the record required to be kept under paragraph (1) or (2).
 - (6) Nothing in this regulation requires a relevant supplier to retain a record—
 - (a) of information mentioned in any of sub-paragraphs (a), (b) and (f) of paragraph (1) or in sub-paragraph (a) of paragraph (2) at any time more than 30 years after the date on which the information was first entered in the record;
 - (b) of information mentioned in any other sub-paragraph of paragraph (1) or (2) at any time more than 5 years after the date on which the information was first entered in the record.
 - F75 Words in regs. 31-34 substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)
 - **F80** Words in reg. 34(1) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(2)

- F81 Section 18 was amended by sections 36(2) and 49(2) of, and paragraph 4 of Schedule 8 to, the Water Act 2003 (c.37). It is prospectively amended by paragraph 26 of Schedule 7 to the Water Act 2014 (c.21) from a date to be appointed.
- **F82** Word in reg. 34(1)(h) omitted (11.7.2018) by virtue of The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(12)**
- F83 Reg. 34(2)(ca) inserted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(5)
- **F84** Word in reg. 34(2)(ca) omitted (11.7.2018) by virtue of The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(12)**

Provision of information

- **35.**—(1) Any person may request a relevant supplier to send them a copy of any record maintained by the relevant supplier under regulation 34, and the relevant supplier must, within 7 days of the receipt of the request, send a copy of the record requested to the person.
 - (2) A relevant supplier must comply with a request under paragraph (1)—
 - (a) in the case of a request relating to a water supply zone, free of charge if the person receives a supply of water in the zone;
 - (b) in any other case, on payment of such reasonable charge as the relevant supplier may determine.
 - (3) Paragraph (1) does not oblige a relevant supplier to comply with a request which is vexatious.
- (4) Where a relevant supplier has previously complied with a request made by any person, paragraph (1) does not oblige it to comply with a subsequent identical or substantially similar request from that person unless a reasonable interval has elapsed between compliance with the previous request and the making of the subsequent request.
- (5) A water undertaker must include in, or append to, at least one of the accounts sent to each customer in any year a statement setting out the rights of that customer under paragraph (1).
- (6) As soon as possible after an event which, by reason of its effect or likely effect on the water supplied by a relevant supplier, gives rise or is likely to give rise to a significant risk to human health, the relevant supplier must notify—
 - (a) in every case—
 - (i) every appropriate local authority,
 - (ii) Public Health England,
 - (iii) the Council, and
 - (iv) the Secretary of State; and
 - (b) in any case where the event gives rise or is likely to give risk to a significant risk to human health in Wales—
 - (i) the National Public Health Service for Wales, and
 - (ii) the Welsh Ministers.
- (7) Where a person has received a notification under paragraph (6), that person may require the relevant supplier to provide that person with such further information relating to the event and its consequences as that person may reasonably require.

PART 10

Functions of local authorities in relation to water quality

Application and interpretation of this Part

- **36.**—(1) This Part applies to the performance by a local authority of its duty under section 77(1) of the Act insofar as that duty relates to water supplies which are not private supplies.
 - (2) In this Part, "specified relevant supplier" in relation to a local authority means—
 - (a) a water undertaker any of whose water supply zones includes an area which is situated within the area of that authority;
 - (b) a [F85] water supply licensee] which uses any such water supply zones for the purposes of supplying water to consumers.

F85 Words in reg. 36(2)(b) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(2)

Duties of local authorities: supplementary provision

- **37.**—(1) In performing its duty under section 77(1) of the Act, a local authority—
 - (a) must make arrangements with the specified relevant supplier to secure that the authority is notified as mentioned in regulation 35(6)(a)(i);
 - (b) may take or cause to be taken, and analyse or cause to be analysed, by a person, designated by that authority in writing, such samples of the water supplied to premises in its area as that authority may reasonably require.
- (2) Regulation 16 applies to samples taken by virtue of paragraph (1) as it applies to samples taken for the purposes of Parts 4 and 5 of these Regulations but with the following modifications—
 - (a) paragraph (1) is to be read as if for the words "water undertaker or [F86] wholesale licensee]" there were to be substituted the words "local authority";
 - (b) paragraph (2)(e)(i) is to be read as if for the words "the water undertaker or the [F86] wholesale licensee]" there were to be substituted "the water undertaker, the [F86] wholesale licensee] or the local authority".

F86 Words in reg. 37(2) substituted (31.3.2017) by The Water Act 2014 (Consequential Amendments etc.) Order 2017 (S.I. 2017/506), arts. 1(1), 32(4)

PART 11

Enforcement

Contraventions by relevant suppliers

38. Any duty or requirement imposed by Parts 4 to 9 of these Regulations on a relevant supplier is enforceable under section 18 of the Act by the Secretary of State or the Authority ^{F87}, whether or not it constitutes an offence.

F87 Section 219(1) of the Act defines "the Authority" as the Water Services Regulation Authority.

PART 12

Review

Review

- **39.**—(1) The Secretary of State must, in relation to England, from time to time—
 - (a) carry out a review of the regulatory provision in these Regulations, and
 - (b) publish a report setting out the conclusions of the review.
- (2) In carrying out a review of any regulatory provision which implements an obligation in Council Directive 98/83/EC on the quality of water intended for human consumption ^{F88} and Council Directive 2013/51/Euratom laying down requirements for the protection of the health of the general public with regard to radioactive substances in water intended for human consumption ^{F89}, the Secretary of State must have regard to how the obligation is implemented in other member States.
 - (3) The report must in particular—
 - (a) set out the objectives intended to be achieved by the regulatory provision,
 - (b) assess the extent to which those objectives are achieved,
 - (c) assess whether those objectives remain appropriate, and
 - (d) if those objectives remain appropriate, assess the extent to which they could be achieved in another way which involves less onerous regulatory provision
- (4) The first report under this regulation must be published before the end of the period of five years beginning with the day on which these Regulations come into force.
- (5) Subsequent reports under this regulation must be published at intervals not exceeding five years.
- (6) In this regulation, "regulatory provision" has the meaning given by section 32(4) of the Small Business, Enterprise and Employment Act 2015 ^{F90}.
 - **F88** OJ No L 330, 5.12.1998, p 32, as last amended by Commission Directive (EU) 2015/1787 (OJ No L 260, 7.10.2015, p 6).
 - **F89** OJ No L 296, 7.11.2013, p 12.
 - F90 2015 c. 26.

[F91Reporting

- **39A.**—(1) The Secretary of State must prepare and publish a report on the quality of water intended for human consumption, with the objective of informing consumers.
 - (2) A report under paragraph (1) must—
 - (a) be published in such manner as the Secretary of State considers appropriate;
 - (b) include, as a minimum, information on all individual supplies of water that—
 - (i) exceed 1,000m³ a day as an average, or
 - (ii) serve more than 5,000 persons;
 - (c) cover a period of three calendar years.

- (3) The first report under this regulation must cover the years 2017, 2018 and 2019 and be published by 31st December 2021.
- (4) Subsequent reports under this regulation must be published at intervals not exceeding three years.]
 - **F91** Reg. 39A inserted (31.12.2020) by The Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/558), regs. 1(1), **18(7)**; 2020 c. 1, Sch. 5 para. 1(1)

PART 13

Amendments and revocations

Amendments and revocations

- **40.**—(1) The Regulations specified in the Table in Schedule 6 are amended in accordance with the provisions of that Table.
- (2) The Regulations specified in the Table in Schedule 7 are revoked to the extent specified in that Table.

Department for Environment, Food and Rural Affairs

Rory Stewart
Parliamentary Under Secretary of State

SCHEDULE 1

Regulation 2

Prescribed concentrations and values

Table A

Microbiological parameters

ents
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(1)	(2)	(3)	(4)	(5)
Item	Parameters	Concentration or value (maximum)	Units of measurement	Point of compliance
1.	Enterococci	0	number/100ml	Consumers' taps
2.	Escherichia coli	0	number/100ml	Consumers' taps
	(E. coli)			

Part II: National requirements

(1)	(2)	(3)	(4)	(5)
Item	Parameters	Concentration or value (maximum)	Units of measurement	Point of compliance
1.	Coliform bacteria	0	number/100ml	Service reservoirs ¹ and water treatment works
2.	Escherichia coli (E. coli)	0	number/100ml	Service reservoirs and water treatment works

¹ Compliance required as to 95% of samples from each service reservoir (regulation 4(6)).

Table B

Chemical parameters

Part I: Directive requirements

(1)	(2)	(3)	(4)	(5)	
Item	Parameters	Concentration or value (maximum)	Units of measurement	Point compliance	of
1.	Acrylamide	0.10	$\mu g/1$	1	
2.	Antimony	5.0	μgSb/1	Consumers' taps	
3.	Arsenic	10	$\mu g A s / 1$	Consumers' taps	
4.	Benzene	1.0	$\mu g/1$	Consumers' taps	
5.	Benzo(a)pyrene	0.010	$\mu g/1$	Consumers' taps	
6.	Boron	1.0	mgB/1	Consumers' taps	
7.	Bromate	10	μgBrO3/1	Consumers' taps	
8.	Cadmium	5.0	μgCd/1	Consumers' taps	

9.	Chromium	50	μgCr/1	Consumers' taps
10.	Copper	2.0	mgCu/1	Consumers' taps
11.	Cyanide	50	μgCN/1	Consumers' taps
12.	1, 2 dichloroethane	3.0	$\mu g/1$	Consumers' taps
13.	Epichlorohydrin	0.10	$\mu g/1$	1
14.	Fluoride	1.5	mgF/1	Consumers' taps
15.	Lead	10	$\mu g P b / 1$	Consumers' taps
16.	Mercury	1.0	$\mu g H g / 1$	Consumers' taps
17.	Nickel	20	$\mu g Ni/1$	Consumers' taps
18.	Nitrate ²	50	mgNO3/1	Consumers' taps
19.	Nitrite ²	0.50	mgNO2/1	Consumers' taps
		0.10		Treatment works
20.	Pesticides ³⁴	0.030	$\mu g/1$	Consumers' taps
	Aldrin			
	Dieldrin	0.030	μg1	Consumer's taps
	Heptachlor			
	Heptachlor epoxide			
	Other pesticides	0.10	$\mu g/l$	Consumers' taps
21.	Pesticides: total ⁵	0.50	$\mu g/1$	Consumers' taps
22.	Polycyclic aromatic hydrocarbon ⁶	0.10	μg/1	Consumers' taps
23.	Selenium	10	μgSe/1	Consumers' taps
24.	Tetrachloroethene and Trichloroethene ⁷	10	μg/l	Consumers' taps
25.	Trihalomethanes: Total ⁸	100	μg/1	Consumers' taps
26.	Vinyl chloride	0.50	μg/1	1

¹ The parametric value refers to the residual monomer concentration in the water as calculated according to specifications of the maximum release from the corresponding polymer in contact with the water. This is controlled by product specification.

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² See also regulation 4(2)(d).

³ See the definition of "pesticides and related products" in regulation 2.

⁴ The parametric value applies to each individual pesticide.

⁵ "Pesticides: total" means the sum of the concentrations of the individual pesticides detected and quantified in the monitoring procedure.

⁶ The specified compounds are—
The specified compounds are—
benzo(b) fluoranthen;
benzo(k) fluoranthene;

benzo(ghi)perylene;
 indeno(1,2,3-cd)pyrene.
 The parametric value applies to the sum of the concentrations of the individual compounds detected and quantified in the monitoring process.

⁸ The specified compounds are—
The specified compounds are—

- chloroform;
- bromoform;
 dibromochloromethane;
 bromodichloromethane

The parametric value applies to the sum of the concentrations of the individual compounds detected and quantified in the monitoring process.

Part II: National requirements

(1)	(2)	(3)	(4)	(5)
Item	Parameters	Concentration or value (maximum)	Units of measurement	Point of compliance
1.	Aluminium	200	$\mu g A 1/1$	Consumers' taps
2.	Colour	20	mg/1 Pt/Co	Consumers' taps
3.	Iron	200	μgFe/1	Consumers' taps
4.	Manganese	50	$\mu g M n / 1$	Consumers' taps
5.	Odour	Acceptable to consumers and no abnormal change		Consumers' taps
6.	Sodium	200	mgNa/1	Consumers' taps
7.	Taste	Acceptable to consumers and no abnormal change		Consumers' taps
8.	Tetrachloromethane	3	μ g/1	Consumers' taps
9.	Turbidity	4	NTU	Consumers' taps

SCHEDULE 2

Regulation 2

Indicator parameters

(1)	(2)	(3)	(4)	(5)	

¹ The water should not be aggressive.

⁷ The parametric value applies to the sum of the concentrations of the individual compounds detected and quantified in the monitoring process.

² Where treatment to reduce the level of radionuclides in water intended for human consumption has been taken, monitoring must be carried out to ensure the continued efficacy of the treatment.

³ Remedial action may be taken by the Secretary of State on radiological protection grounds without further consideration and deemed to be justified where radon concentrates exceed 1,000 Bq/1.

⁴ If tritium concentration exceeds its parametric value, an investigation (which may include analysis) of the presence of artificial radionuclides is required.

⁵ May be monitored from samples of water leaving treatment works or other supply point, as no significant change during distribution.

Item	Parameters	Specification concentration or value (maximum unless otherwise stated) or state	Units of measurement	Point of compliance
1.	Ammonium	0.50	mgNH4/1	Consumers' taps
2.	Chloride ¹	250	mgC1/	Supply point ⁵
3.	Clostridium	0	Number/100ml	Supply point ⁵
	Perfringens (including spores)			
4.	Coliform bacteria	0	Number/100ml	Consumers' taps
5.	Colony counts	No abnormal change	Number/1ml at 22°C	Consumers' taps, service reservoirs and treatment works
6.	Conductivity ¹	2500	$\mu S/cm$ at $20^{\circ} C$	Supply point ⁵
7.	Hydrogen ion	9.5 (maximum) 6.5 (minimum)	pH value	Consumers' taps
8.	Indicative dose ²	0.10	mSv	Supply point ⁵
	(a) gross alpha	0.1	Bq/1	Supply point ⁵
	(b) gross beta	1	Bq/1	Supply point ⁵
9.	Radon ³	100	Bq/1	Supply point
10.	Sulphate ¹	250	mgSO4/l	Supply point ⁵
11.	Total organic carbon (TOC)	No abnormal change	mgC/l	Supply point
12.	Tritium (for radioactivity) ⁴	100	Bq/l	Supply point ⁵
13.	Turbidity	1	NTU	Treatment works

¹ The water should not be aggressive.

² Where treatment to reduce the level of radionuclides in water intended for human consumption has been taken, monitoring must be carried out to ensure the continued efficacy of the treatment.

³ Remedial action may be taken by the Secretary of State on radiological protection grounds without further consideration and deemed to be justified where radon concentrates exceed 1,000 Bq/1.

⁴ If tritium concentration exceeds its parametric value, an investigation (which may include analysis) of the presence of artificial radionuclides is required.

⁵ May be monitored from samples of water leaving treatment works or other supply point, as no significant change during distribution.

[F92SCHEDULE 3

Regulation 6

Monitoring

F92 Sch. 3 substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(13)**

PART 1

Group A and Group B parameters

Table 1

Group A parameters and circumstances for monitoring

(1) It	tem (2) Parameter	(3) Circumstances
1	Aluminium	Where used as a water treatment chemical or where the water originates from, or is influenced by, surface waters
2	Ammonium	Where chloramination is practised
3	Coliform bacteria	In all circumstances
4	Colony counts 22°C	In all circumstances
5	Colour	In all circumstances
6	Conductivity	In all circumstances
7	E. coli	In all circumstances
8	Hydrogen ion	In all circumstances
9	Iron	Where used as a water treatment chemical 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	Where chloramination is practised
12	Nitrite	Where chloramination is practised
13	Odour	In all circumstances
14	Residual disinfectant	In all circumstances
15	Taste	In all circumstances
16	Turbidity	In all circumstances

⁽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)

(1) Item number	(2) Parameter	(3) Circumstances	
1	Aluminium	Where not used as a water treatme chemical or where the water neith originates from, nor is influenced be surface waters	
2	Ammonium	Where chloramination is not practised	
3	Antimony	In all circumstances	
4	Arsenic	In all circumstances	
5	Benzene	In all circumstances	
6	Benzo(a)pyrene	In all circumstances	
7	Boron	In all circumstances	
8	Bromate	In all circumstances	
9	Cadmium	In all circumstances	
10	Chloride	In all circumstances	
11	Chromium	In all circumstances	
12	Clostridium perfringens (including spores)	In all circumstances	
13	Copper	In all circumstances	
14	Cyanide	In all circumstances	
15	1, 2 dichloroethane	In all circumstances	
16	Enterococci	In all circumstances	
17	Fluoride	In all circumstances	
18	Gross alpha	In all circumstances	
19	Gross beta	In all circumstances	
20	Iron	Where not used as a water treatment chemical or where the water neither originates from, nor is influenced by, surface waters	
21	Lead	In all circumstances	

⁽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 must be taken if there is any change in relation to that supply that could affect the concentration of radionuclides in the water supply.

(1) Item number	(2) Parameter	(3) Circumstances	
22	Manganese	Where the water neither originates from, nor is influenced by, surface waters.	
23	Mercury	In all circumstances	
24	Nickel	In all circumstances	
25	Nitrate	Where chloramination is not practised	
26	Nitrite	Where chloramination is not practised	
27	Pesticides and related products	In all circumstances	
28	Polycyclic aromatic hydrocarbon	In all circumstances	
29	Radon	In all circumstances	
30	Selenium	In all circumstances	
31	Sodium	In all circumstances	
32	Sulphate	In all circumstances	
33	Tetrachloroethene	In all circumstances	
34	Tetrachloromethane	In all circumstances	
35	Total organic carbon	In all circumstances	
36	Trichloroethene	In all circumstances	
37	Trihalomethanes: Total	In all circumstances	
38	Tritium	In all circumstances	

⁽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 must 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 [F93 in water supply zones (or supply points)]

(1) Item number	(2) Parameter	(3) Circumstances
1	Benzene	In all circumstances
2	Boron	In all circumstances
3	Bromate	In all circumstances
4	Chloride	In all circumstances
5	[F94 Clostridium perfringens (including spores) (1)]	In all circumstances
6	Cyanide	In all circumstances
7	1, 2 dichloroethane	In all circumstances
8	Fluoride	In all circumstances
9	Gross alpha	In all circumstances
10	Gross beta	In all circumstances
11	[F95Indicative dose (1)]	In all circumstances
12	Mercury	In all circumstances
13	Nitrite	When chloramination is not practised
14	Pesticides and related products	In all circumstances
15	Radon	In all circumstances
16	Sulphate	In all circumstances
17	[F96Tetrachloroethene/Trichloroethene (1)]	In all circumstances
18	Tetrachloromethane	In all circumstances
19	Total organic carbon	In all circumstances
F97	F97	F97
• • •		• • •
21	Tritium	In all circumstances

⁽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. In other circumstances, 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 must be taken if there is any change in relation to that supply that could affect the concentration of radionuclides in the water supply.

F93 Words in Sch. 3 Pt. 1 substituted (29.3.2019) by The Environment, Food and Rural Affairs (Miscellaneous Amendments etc.) Regulations 2019 (S.I. 2019/526), regs. 1(2), 6(3)(a)(i)

- **F94** Words in Sch. 3 Pt. 1 substituted (29.3.2019) by The Environment, Food and Rural Affairs (Miscellaneous Amendments etc.) Regulations 2019 (S.I. 2019/526), regs. 1(2), 6(3)(a)(ii)
- F95 Words in Sch. 3 Pt. 1 substituted (29.3.2019) by The Environment, Food and Rural Affairs (Miscellaneous Amendments etc.) Regulations 2019 (S.I. 2019/526), regs. 1(2), 6(3)(a)(iii)
- Words in Sch. 3 Pt. 1 substituted (29.3.2019) by virtue of The Environment, Food and Rural Affairs (Miscellaneous Amendments etc.) Regulations 2019 (S.I. 2019/526), regs. 1(2), 6(3)(a)(iv)
- F97 Word in Sch. 3 Pt. 1 omitted (29.3.2019) by The Environment, Food and Rural Affairs (Miscellaneous Amendments etc.) Regulations 2019 (S.I. 2019/526), regs. 1(2), 6(3)(a)(v)

Table 4

Group A1 parameters

(1) Item number	(2) Parameter
1	Coliform bacteria
2	E. coli
3	Residual disinfectant

Table 5

Group A2 parameters

(1) Item number	(2) Parameter	
1	Coliform bacteria	
2	Colony counts 22°C	
3	E. coli	
4	Nitrite	
5	Residual disinfectant	
6	Turbidity	

Table 6

Group A3 parameters

(1) Item number	(2) Parameter
1	Conductivity

Table 7

Group A4 parameters

(1) Item number	(2) Parameter
1	Aluminium
2	Ammonium
3	Colony counts 22°C

(1) Item number	(2) Parameter	
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

Annual sampling frequencies for Group A4 parameters: water supply zones

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 1 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 given under regulation 9.

For the purposes of this table, 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.

Table 8

Annual sampling frequencies for Group A4 parameters: water supply zones

(2) Standard sampling frequency per year
2
4
12
24
36
52
76

Table 9

Annual sampling frequencies for Group B1 parameters: water supply zones

(1) Estimated population of water supply zone	(2) Standard sampling frequency per year
<100	1
100-4,999	4
5000-100,000	8

Table 10

Annual sampling frequencies for Group A1: water supply zones

(1) Estimated population of water supply zone	(2) Standard sampling frequency per year
<100	4
≥100	12 per 5,000 population

For the purposes of this table, 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.

PART 3

Annual sampling frequencies: treatment works and supply points

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

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 given under regulation 9.

Table 11

(1) Volume of water supplied m³/day	(2) Standard sampling frequency per year
<20	4
20-1,999	[^{F98} 52]
2,000-5,999	104
6,000-11,999	208
≥12,000	365

F98 Word in Sch. 3 Pt. 3 substituted (29.3.2019) by The Environment, Food and Rural Affairs (Miscellaneous Amendments etc.) Regulations 2019 (S.I. 2019/526), **regs. 1(2)**, 6(3)(b)

Table 12

Annual sampling frequencies for Group A3 parameters: supply points

(1) Volume of water supplied m³/day	(2) Standard sampling frequency per year
<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

(1) Volume of water supplied m³/day	(2) Standard sampling frequency per year
<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]

SCHEDULE 4

Regulation 6

Monitoring for indicative dose and analytical performance characteristics

Monitoring for compliance with the ID

- **1.**—(1) A water undertaker may use various reliable screening strategies to indicate the presence of radioactivity in water intended for human consumption.
 - (2) These strategies may include screening for—
 - (a) certain radionuclides, or screening for an individual radionuclide,
 - (b) gross alpha activity or gross beta activity screening.

Screening for certain radionuclides or for an individual radionuclide

- **2.**—(1) If one of the activity concentrations exceeds 20% of the corresponding derived value or the tritium concentration exceeds its parametric value listed in Schedule 2, an analysis of additional radionuclides is required.
- (2) In deciding which radionuclides are required to be measured for each supply, a water undertaker must take into account all relevant information about likely sources of radioactivity.

Screening strategies for gross alpha activity and gross beta activity

- **3.**—(1) A water undertaker may use a screening strategy for gross alpha and gross beta to monitor for the parametric indicator value for indicative dose.
 - (2) Subject to paragraph (3), the recommended screening values are—
 - (a) 0.1Bq/l for gross alpha activity;
 - (b) 1.0Bq/l for gross beta activity F99.
- (3) If the gross alpha activity exceeds 0.1Bq/l or the gross beta activity exceeds 1.0Bq/l, analysis for specific radionuclides is required.
- (4) The Secretary of State may set alternative screening levels for gross alpha activity and gross beta activity where it can be demonstrated by the water undertaker that the alternative levels are in compliance with an ID of 0.1 mSv.
- (5) The radionuclides to be measured must be based on all relevant information about likely sources of radioactivity.
 - **F99** Where appropriate gross beta activity may be replaced by residual beta activity after subtraction of the K-40 activity concentration.

Calculation of the ID

- **4.**—(1) The ID must be calculated from—
- [F100(a)] the measured radionuclide concentrations and the dose coefficients 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, or
 - (b) more recent information recognised by the Secretary of State, on the basis of the annual intake of water (730 litres for adults).

(2) Where the following formula is satisfied, it can be assumed that the ID is less than the parametric value of 0.1 mSv and no further investigation is required—

$$\sum_{i=1}^{n} \frac{C_i \text{ (obs)}}{C_i \text{ (der)}} \le 1$$

where-

Table 1

Derived concentrations for radioactivity in water intended for human consumption

This table includes values for the most common natural and artificial radionuclides: these are precise values, calculated for a dose of 0.1 mSy, an annual intake of 730 litres and using the dose coefficients [F101] 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]. Derived concentrations for other radionuclides can be calculated on the same basis, and values can be updated on the basis of more recent information recognised by the Secretary of State

(1) Origin	(2) Nuclide	(3) Derived concentration
Natural:	U-238 ¹	3.0 Bq/1
	U-234 ¹	2.8 Bq/1
	Ra-226	0.5 Bq/1
	Ra-228	0.2 Bq/1
	Pb-210	0.2 Bq/1
	Po-210	0.1 Bq/1
Artificial:	C-14	240 Bq/1
	Sr-90	4.9 Bq/1
	Pu-239/Pu-240	0.6 Bq/1
	Am-241	0.7 Bq/1
	Co-60	40 Bq/1
	Cs-134	7.2 Bq/1
	Cs-137	11 Bq/1
	1-131	6.2 Bq/1

¹ This Table allows only for the radiological properties of uranium, not for its chemical toxicity.

[&]quot; $C_i(obs)$ " means observed concentration of radionuclide I;

[&]quot; $C_i(der)$ " means derived concentration of radionuclide i;

[&]quot;n" means number of radionuclides detected.

Table 2
Performance characteristics and methods of analysis

For the following parameters and radionuclides, the method of analysis used must, as a minimum, be capable of measuring activity concentrations with a limit of detection specified below.

<i>(1)</i>	(2)	(3)	
Parameters radionuclides	and Limit of detecti 2)	on (Notes 1, Notes	
Tritium	10 Bq/1	Note 3	
Radon	10 Bq/1	Note 3	
gross alpha activity	$0.04~\mathrm{Bq/1}$	Note 4	
gross beta activity	0.4 Bq/1	Note 4	
U-238	$0.02~\mathrm{Bq/1}$		
U-234	$0.02~\mathrm{Bq/1}$		
Ra-226	$0.04~\mathrm{Bq/1}$		
Ra-228	$0.02~\mathrm{Bq/1}$	Note 5	
Pb-210	$0.02~\mathrm{Bq/1}$		
Po-210	$0.01~\mathrm{Bq/1}$		
C-14	20 Bq/1		
Sr-90	0.4 Bq/1		
Pu-239/Pu-240	$0.04~\mathrm{Bq/1}$		
Am-241	0.06 Bq/1		
Co-60	0.5 Bq/1		
Cs-134	0.5 Bq/1		
Cs-137	0.5 Bq/1		
I-131	0.5 Bq/1		

F102Note 1: The limit of detection must be calculated according to the ISO standard 11929: Determination of the characteristic limits (decision threshold, detection limit, and limits of confidence interval) for measurements of ionising radiation – Fundamentals and application, with probabilities of errors of 1st and 2nd kind of 0.05 each.

- Note 3: The limit of detection for tritium and for radon is 10% of its parametric value of 100 Bq/1.
- Note 4: The limit of detection for gross alpha activity and gross beta activities are 40% of the screening values of 0.1 and 1.0 Bq/1 respectively.
- Note 5: This limit of detection applies only to initial screening for ID for a new water source; if initial checking indicates that it is not plausible that Ra-228 exceeds 20% of the derived concentration, the

F103 Note 2: Measurement uncertainties must be calculated and reported as complete standard uncertainties, or as expanded uncertainties with an expansion factor of 1.96 according the ISO Guide for the Expression of Uncertainty in Measurement.

Changes to legislation: There are currently no known outstanding effects for the The Water Supply (Water Quality) Regulations 2016. (See end of Document for details)

limit of detection may be increased to 0.08 Bq/1 for routine Ra-228 nuclide specific measurements, until a subsequent re-check is required.

- **F100** Sch. 4 para. 4(1)(a) substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(14)(a)**
- **F101** Words in Sch. 4 substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(14)(b)**
- **F102** See sections 17A and 219(1) of the Act for the meaning of "licensed water supplier". This definition is prospectively repealed by paragraph 120 of Schedule 7 to the Water Act 2014 from a date to be appointed.
- **F103** S.I. 2000/3184, as amended by S.I. 2001/2885, 2002/2469, 2005/2035, 2007/2734, 2010/991, 2013/235, 1387

SCHEDULE 5

Regulation 16

Analytical methodology

[F104Table A1

Microbiological parameters for which, subject to regulation 16(6), methods of analysis are specified

(1) Parameter	(2) Method of analysis
E. coli and coliform bacteria	EN ISO 9308-1 or EN ISO 9308-2
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]

F104 Sch. 5 Table A1 substituted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), **2(15)(a)** (with reg. 3)

Table A2

F105

F105 Sch. 5 Table A2 omitted (11.7.2018) by virtue of The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), 2(15)(b) (with reg. 3)

[F106 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 parmetric value set out in Schedules 1 and 2.

(1) Parameters	(2) Uncertainty of measurement % of the parametric value (except for pH)
Aluminium	25
Ammonium	40
Antimony	40
Arsenic	30
Benzene	40
Benzo(a)pyrene	50
Boron	25
Bromate	40
Cadmium	25
Chloride	15
Chromium	30
Colour	20
Conductivity	20
Copper	25
Cyanide	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	50
Pesticides	30
Polycyclic aromatic hydrocarbons	50
Selenium	40

(1) Parameters	(2) Uncertainty of measurement % of the parametric value (except for pH)
Sodium	15
Sulphate	15
Tetrachloroethene	30
Tetrachloromethane	30
Trichloroethene	40
Trihalomethanes: total	40
Total organic carbon	30
Turbidity	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 at least the percentage of the parametric value stated in the table.
- (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)".
- (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 I of Table B in Schedule 1.
- (7) The performance characteristics apply to individual substances, specified at 50% of the parametric value in Part I of Table B in 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".
- (9) The uncertainty of measurement must be estimated at the level of 1.0 nephelometric turbidity units) in accordance with European standard EN ISO 7027-1 entitled "Water quality – Determination of turbidity – Part 1: Quantitative methods (ISO 7027-1".]

F106 Sch. 5 Table A3 and footnotes inserted (11.7.2018) by The Water Supply (Water Quality) (Amendment) Regulations 2018 (S.I. 2018/706), regs. 1(1), 2(15)(c) (with reg. 3)

SCHEDULE 6

Regulation 40(1)

Amendments

(1) Regulations amended	to be	(2) References	(3) Provisions to be amended	(4) Amendments to be made
The Legisla Regulatory (Regulatory Order 2007	tive and Reform Functions)		Part 2 of the Schedule, under the heading "Water"	11 5

Supply (Water Quality)
Regulations 2016 "

The Water Quality and S.I. 2016/303 The Schedule For "Water Supply

Supply (Fees) Order 2016 (Water Quality)

Regulations 2000" substitute "Water Supply (Water Quality) Regulations 2016"

F107 There are amendments not relevant to these Regulations.

SCHEDULE 7

Regulation 40(2)

Revocations

(1) Regulations revoked	(2) References	(3) Extent of revocation
The 2000 Regulations	S.I. 2000/3184	The whole Regulations
The Water Supply (Water Quality) (Amendmen Regulations 2001	er S.I. 2001/2885 t)	The whole Regulations
The National Health Service Reform and Health Can Professions Act 200 (Supplementary, Consequentiate etc. Provisions) Regulation 2002	re 2 al	Schedule 1 Part 2 paragraph 91
The Water Act 200 (Consequential and Supplementary Provisions Regulations 2005		Regulations 3, 10 and 20
The Water Supply (Water Quality) (Amendmen Regulations 2007	er S.I. 2007/2734 t)	The whole Regulations
The Legislative and Regulator Reform (Regulatory Functions Order 2007		The references in Part 2 of the Schedule, under the heading "Water", to—
		(a) the Water Supply (Water Quality) Regulations 2001; and

Changes to legislation: There are currently no known outstanding effects for the The Water Supply (Water Quality) Regulations 2016. (See end of Document for details)

(b) the Water Supply (Water Quality) (Amendment) Regulations 2001

The Water Supply Regulations S.I. 2010/991 The whole Regulations

2010 F112

The National Treatment S.I. 2013/235 Paragraph 43 of Schedule 2

Agency (Abolition) and the Health and Social Care Act 2012 (Consequential, Transitional and Savings Provisions) Order 2013

The Construction Products S.I. 2013/1387 Paragraph 3 of Schedule 5 Regulations 2013

F108 Amended by S.I. 2007/2734.

F109 There are amendments not relevant to these Regulations.

F110 Amended by S.I. 2007/2734.

F111 Amended by S.I. 2013/1387.

F112 Amended by S.I. 2016/573.

F113 There are amendments not relevant to these Regulations.

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations supplement Chapter III of the Water Industry Act 1991 (c.56) (water supply). They also transpose requirements of Council Directive 98/83/EC on the quality of water intended for human consumption (OJ No L 330, 5.12.1998, p 32) and Council Directive 2013/51/Euratom laying down requirements for the protection of the health of the general public with regard to radioactive substances in water intended for human consumption (OJ No L 296, 7.11.2013, p 12). They are primarily concerned with the quality of water supplied in England by water undertakers and licensed water suppliers for domestic or food production purposes and with arrangements for the publication of information about water quality. They revoke and replace the Water Supply (Water Quality) Regulations 2000 (S.I. 2000/3184).

Part 1 of the Regulations sets out preliminary provisions.

Part 2 requires water undertakers to identify annually the areas ("water supply zones") that are to be relevant for a particular year for the purposes of the application of the provisions of the Regulations.

Part 3 prescribes standards of wholesomeness in respect of water supplied by water undertakers to premises for domestic or food production purposes (referred to in the Regulations as "regulation 4(1) purposes").

Part 4 provides for the monitoring of water supplies. Regulation 5 defines two monitoring regimes: "audit monitoring" and "check monitoring". Regulation 6 sets out general monitoring provisions relating to the parameters set out in Schedules 1 (prescribed concentrations and values) and 2 (indicator parameters). Paragraphs (7) to (15) of regulation 6 impose requirements for the monitoring of indicative dose, radon and tritium ("radioactive parameters"). In general, these are subject to audit monitoring. For indicative dose, the provisions in Schedule 4 also apply. Regulation 6 also makes provision for monitoring supplies of water from tankers. Regulation 7 requires water undertakers to select at random the points at which samples are to be taken for the purposes of monitoring (referred to as "sampling points"). Regulation 8 provides that the Secretary of State may authorise the taking of samples from points other than sampling points. Regulation 9 deals with the number of samples to be taken. Regulation 10 requires samples to be taken where water undertakers have reason to believe that the quality of the water within their water supply zone has been adversely affected by the presence of certain elements, organisms or substances.

Part 5 contains additional provisions relating to monitoring. Regulations 13 and 14 require samples to be taken in respect of particular organisms and substances, at treatment works and at reservoirs which store treated water. Regulation 15 requires samples to be taken before water is supplied from new sources and from sources which have not recently been used. Regulation 16 prescribes requirements relating to the taking, handling, storage, transport and analysis of samples. Part 6 requires water undertakers and combined licensees to identify every point from which it abstracts water for supply for regulation 4(1) purposes and to take samples from those points to comply with regulations 26 to 28. This implements Article 8(1) and (2) 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 (OJ No L 327, 22.12.2000, p 1).

Part 7 requires water undertakers and combined licensees to investigate the cause of any failure, or apprehended failure, of any parameters set out in Schedule 1 or any indicator parameters set out in Schedule 2 and to notify the Secretary of State. Where the failure is attributable to a domestic distribution system or the maintenance of that system, notification must be provided to the consumers of the affected water supply and to any other relevant supplier. Regulations 20 and 21 provide for actions that may be taken by the Secretary of State upon receipt of a notification under regulation 18 or 19. Where a failure relates to a parameter in Table B in Schedule 1, and certain other conditions are met, the Secretary of State may require the supplier to apply for an authorisation for a departure from the requirements of Part 3 of the Regulations. The circumstances in which authorisations may be granted and the conditions to which they are subject are set out in regulations 22 and 23. Provision is made in regulation 24 for publicising authorisations. Regulation 25 provides for the revocation and variation of authorisations. Part 8 deals with the treatment of water and regulates the substances, processes and products that may be used by water undertakers in connection with the supply of water. Regulation 26 imposes requirements relating to the disinfection and treatment of water. Regulation 27 provides for the carrying out of risk assessments and subsequent reviews. Regulation 28 requires water undertakers and combined licensees to submit reports of risk assessments and reviews to the Secretary of State. Paragraph (4) of regulation 28 sets out the steps that the Secretary of State may take on receipt of a report which states there is or has been a significant risk of supplying water that could constitute a potential danger to human health or could be unwholesome. Regulation 29 requires water undertakers and combined licensees to treat water to minimise the risk of copper and lead contamination from pipes. Regulation 30 sets out provisions relating to the replacement or modification of lead pipes. Regulation 31 specifies the circumstances in which water undertakers and combined licensees may apply or introduce substances or products into water supplied for regulation 4(1) purposes. Regulation 32 enables the Secretary of State to require approval of the use of any process in connection with the supply of water for regulation 4(1) purposes. Under regulation 33, contravention of specified requirements of regulations 26, 28, 31 and 32 are criminal offences, as is the making of false statements.

Changes to legislation: There are currently no known outstanding effects for the The Water Supply (Water Quality) Regulations 2016. (See end of Document for details)

Part 9 deals with the maintenance of records and provision of information by water undertakers, combined licensees and retail licensees.

Part 10 imposes requirements on local authorities in the performance of their duties in relation to the quality of water supplied by water undertakers or licensed water suppliers in areas which are situated in the area of the local authority.

Part 11 provides that contraventions by any relevant supplier of duties or requirements imposed by Parts 4 to 9 of the Regulations are enforceable under section 18 of the Water Industry Act 1991 by the Secretary of State or the Water Services Regulation Authority (known as Ofwat). This provision is in addition to the criminal sanctions provided by regulation 33.

Part 12 provides for review of the Regulations by the Secretary of State.

Part 13 provides for amendments and revocations as set out in Schedules 6 and 7. Schedules 1 and 2 set out the parameters applicable to the Regulations. Schedule 3 sets out provisions applicable to monitoring for those parameters, as provided for in regulation 6. Schedule 4 sets out provisions for monitoring for indicative dose and analytical performance characteristics as provided for in regulation 6. Schedule 5 sets out the analytical methodology as provided for in regulation 16.

A validation impact assessment of the effect that this instrument will have on the costs of business, the voluntary sector and the public sector is available from the Water Services Team, the Department for Environment, Food and Rural Affairs, Area 3D, Nobel House, 17 Smith Square, London SW1P 3JR. A transposition note is submitted with the Explanatory Memorandum which is available alongside the instrument on www.legislation.gov.uk.

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