SCHEDULE 1

Regulations 6(1) and 9(3)

INFORMATION TO BE REGISTERED

Dates by which the register must contain information

- 1. The register must contain or specify—
 - (a) by 1st January 2019—
 - (i) the information specified in paragraph 2, but only in so far as the information can be readily determined from existing sources of available information; and
 - (ii) the information specified in paragraph 4;
 - (b) within 28 days of the date on which the information is first known (or becomes readily available) to the enforcing authority, the information specified in paragraph 3; and
 - (c) by 1st January 2022, any other information specified in paragraph 2.

Information relating to private water supply systems

- 2. For each private water supply system ("the system"), the register must contain or specify-
 - (a) a unique reference number, and a unique locality-based name, for the system;
 - (b) which supply zone the system is situated in;
 - (c) the estimated volume of water (in m³) supplied each day by the system (as an average taken over a year) to all premises (including those outside the area of the enforcing authority) which are within the supply zone for the water supplied;
 - (d) the estimated maximum number of persons served by the system on the same day (including any person served outside the area of the enforcing authority);
 - (e) a map identifying the location of every known part of the system (including any part of the system which is outside the area of the enforcing authority), including (if known to the enforcing authority)—
 - (i) the ownership of land from which any part of the water is abstracted; and
 - (ii) the ownership of land in, on or over which any part of the supply is installed;
 - (f) for each point at which water is abstracted—
 - (i) the Ordnance Survey national grid reference; and
 - (ii) whether the water is abstracted from a watercourse, loch, spring, well, borehole or other source (and, if abstracted from the latter, a description of the other source);
 - (g) details of any treatment carried out in relation to water supplied by the system;
 - (h) the address of each building supplied, or to be supplied, with water;
 - (i) if known to the enforcing authority, the name and address of any person who owns-
 - (i) a building supplied, or to be supplied, with the water;
 - (ii) land from which any part of the water is abstracted (from the water environment); and
 - (iii) land in, on or over which any part of the private water supply system is installed;
 - (j) details of monitoring programmes (so far as relevant) prepared by the enforcing authority to meet its obligations under these Regulations; and

(k) details of any grant awarded or paid in relation to the system under the Private Water Supply (Grants) (Scotland) Regulations 2006(1).

Information relating to water supplied

3. For each registered private water supply system, the register must also contain or specify the following information (if any) in relation to water ("the water") supplied through any part of the system to a point of compliance in the area of the enforcing authority:—

- (a) a copy of the risk assessment in relation to the water;
- (b) information about any relevant derogation under these Regulations, including a copy of-
 - (i) application for the derogation;
 - (ii) the derogation granted; and
 - (iii) any revocation or modification of the derogation;
- (c) the results of each sample of the water taken and analysed pursuant to these Regulations;
- (d) the results of any investigation under regulation 21(a);
- (e) details of any remedial action taken pursuant to regulation 21(b) or (c); and
- (f) a copy of any remediation notice, enforcement notice or emergency notice served in relation to the water.

Information from previous register

4.—(1) For each registered private water supply system ("the system"), the register must contain copies of any information ("the information") relating to—

- (a) the system; and
- (b) the water previously supplied into, through or from the system,

which was, immediately before 27th October 2017, required to be maintained in a register ("a previous register") under regulation 34 of the Private Water Supplies (Scotland) Regulations 2006(**2**).

(2) If any information which an enforcing authority ("the registering authority") is required to keep under sub-paragraph (1) was immediately before 27th October 2017 contained in a previous register which was maintained by any other enforcing authority, the other enforcing authority must forward the information (or, if the other enforcing authority is also required to maintain a register containing any of the same information, forward a copy of it) to the registering authority.

⁽¹⁾ S.S.I. 2006/210.

⁽²⁾ S.S.I. 2006/209, as amended by S.S.I. 2010/95, S.S.I. 2014/364 and S.S.I. 2015/346.

SCHEDULE 2

Regulation 3(1)

PARAMETERS AND PARAMETRIC VALUES

PART A

Microbiological parameters

Parameter	Parametric value (number/volume)		
Enterococci	0/100 ml		
Escherichia coli	0/100 ml		

PART B

Chemical parameters

Parameter	Parametric value	Unit	Notes
Acrylamide	0.10	µg/l	Note 1
Antimony	5.0	µg/l	
Arsenic	10	µg/l	
Benzene	1.0	µg/l	
Benzo(a)pyrene	0.010	µg/l	
Boron	1.0	mg/l	
Bromate	10	µg/l	Note 2
Cadmium	5.0	µg/l	
Chromium	50	µg/l	
Copper	2.0	mg/l	Note 3
Cyanide	50	µg/l	
1,2-dichloroethane	3.0	µg/l	
Epichlorohydrin	0.10	µg/l	Note 1
Fluoride	1.5	mg/l	
Lead	10	µg/l	Note 3 and 4
Mercury	1.0	µg/l	
Nickel	20	µg/l	Note 3
Nitrate	50	mg/l	
Nitrite	0.50	mg/l	
	0.10	mg/l	Note 5

Parameter	Parametric	Unit	Notes
	value		
Pesticides—			Note 6
Aldrin	0.030	µg/l	
Dieldrin	0.030	µg/l	
Heptachlor	0.030	µg/l	
Heptachlor epoxide	0.030	µg/l	
Other pesticide	0.10	µg/l	Note 7
Pesticides: total	0.50	µg/l	Notes 6 and 8
Polycyclic aromatic hydrocarbons	0.10	μg/l	Note 9
Selenium	10	μg/l	
Tetrachloroethene and trichloroethene	10	μg/l	Note 10
Trihalomethanes: total	100	µg/l	Notes 2 and 11
Vinyl chloride	0.50	µg/l	Note 1

Note 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.

Note 2: Where possible, without compromising disinfection, an enforcing authority (in relation a supply of water) must strive for a lower value.

Note 3: The parametric value applies to a sample of water obtained by an adequate sampling method at the tap and taken so as to be representative of a weekly average value ingested by consumers of the water. Where appropriate the sampling and monitoring methods must be applied in accordance with any guidelines under Article 7(4) of Council Directive 98/83/EC on the quality of water intended for human consumption(3). Each enforcing authority in relation to the water must take account of the occurrence of peak levels that may cause adverse effects on human health.

Note 4: When implementing measures to achieve compliance with this parametric value, each enforcing authority (in relation supplies of water to premises) must progressively give priority where lead concentrations in the water are highest.

Note 5: The additional parametric value of 0.10 mg/l applies only if the water is subject to treatment to improve its quality. The point of compliance for this additional parametric value is the point at which the water flows out from the treatment works.

Note 6: "Pesticide" means an organic insecticide, organic herbicide, organic fungicide, organic nematocide, organic acaricide, organic algicide, organic rodenticide, organic slimicide, a related product (including growth regulator) and any relevant metabolite, degradation or reaction product. Only those pesticides which are likely to be present in a supply of water need to be monitored.

Note 7: "Other pesticide" means a pesticide other than aldrin, dieldrin, heptachlor and heptachlor epoxide. The parametric value applies to each "other pesticide" individually.

⁽³⁾ OJ L 330, 5.12.1998, p.32, as amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p.1), Regulation (EC) No 596/2009 of the European Parliament and of the Council (OJ L 188, 18.7.2009, p.14), Commission Directive (EU) 2015/1787 (OJ L 260, 7.10.2015, p.6) and Corrigendum (OJ L 111, 20.4.2001, p.31).

Note 8: The parametric value for this parameter is the sum of all individual pesticides detected and quantified in the monitoring procedure.

Note 9: The parametric value for this parameter is the sum of the concentrations of benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)perylene and indeno(1,2,3-cd)pyrene.

Note 10: The parametric value for this parameter is the sum of the concentrations of tetrachloroethene and trichloroethene.

Note 11: The parametric value for this parameter is the sum of chloroform, bromoform, dibromochloromethane and bromodichloromethane.

PART C

Indicator parameters

Parameter	Parametric value	Unit	Notes
Aluminium	200	µg/l	
Ammonium	0.50	mg/l	
Chloride	250	mg/l	Note 1
Clostridium perfringens	0	number/100 ml	
(including spores)			
Colour	Acceptable to consumers and no abnormal change		
Colour	20	mg/l Pt/Co	
Conductivity	2500	µS/cm at 20 °C	Note 1
Hydrogen ion concentration	\geq 6.5 and \leq 9.5	pH units	Notes 1 and 3
Iron	200	μg/l	Note 2
Manganese	50	μg/l	Note 2
Odour	Acceptable to consumers and no abnormal change		
Oxidisability	5.0	mg/l O ₂	Note 4
Sulphate	250	mg/l	Note 1
Sodium	200	mg/l	
Taste	Acceptable to consumers and no abnormal change		
Colony count 22 °C	No abnormal change		
Coliform bacteria	0	number/100 ml	Note 5
Total organic carbon	No abnormal change		Note 6

Parameter	Parametric value	Unit	Notes
Turbidity	Acceptable to consumers and no abnormal change		Note 7

Parametric values for radon, tritium and indicative dose-

Parameter	Parametric value	Unit	Notes
Radon	100	Bq/l	Note 8
Tritium	100	Bq/l	Note 9
Indicative dose	0.10	mSv	

Note 1: The water must not be aggressive.

Note 2: This parameter must be measured if the water originates from, or is influenced by, surface water.

Note 3: For still water put into bottles or containers, the minimum value may be reduced to 4.5 pH units. For water put into bottles or containers which is naturally rich in or artificially enriched with carbon dioxide, the minimum value may be lower.

Note 4: This parameter need not be measured if total organic carbon is analysed.

Note 5: For water put into bottles or containers the unit is number/250 ml.

Note 6: This parameter need not be measured for supplies of less than 10,000 m³ of water a day.

Note 7: If the water is subject to treatment to improve its quality, each enforcing authority in relation to the water must strive to ensure that the water, at the point at which it flows out from the treatment works, does not exceed 1.0 nephelometric turbidity units.

Note 8: Remedial action is to be deemed justified on radiological protection grounds, without further consideration, where radon concentrations exceed 1,000 Bq/l.

Note 9: Elevated levels of tritium may indicate the presence of other artificial radionuclides. If the tritium concentration exceeds its parametric value, each enforcing authority in relation to the water must also carry out an analysis of the presence of other artificial radionuclides.

SCHEDULE 3

Regulation 19(2) and (3)

MONITORING

PART A

Monitoring programmes

- 1. Each monitoring programme must—
 - (a) verify that—
 - (i) the measures in place to control risks to human health throughout the water supply chain (from the catchment area through abstraction, treatment and storage to distribution) are working effectively; and
 - (ii) water at the point of compliance meets the water quality standards;

- (b) provide information on the quality of water supplied to demonstrate that—
 - (i) the water quality standards are being met; and
 - (ii) the parametric values in Table C are not being exceeded; and
- (c) identify the most appropriate means of mitigating the risks to human health.

2.—(1) Each monitoring programme must fulfil the requirements of Part B of this schedule (and, where applicable, Part C of this schedule) by means of—

- (a) the collection and analysis of the quality of discrete water samples; or
- (b) measurements of the quality of water recorded by a continuous monitoring process.
- (2) In addition, monitoring programmes may consist of-
 - (a) inspections of records of the functionality and maintenance status of equipment; and
 - (b) inspections of the catchment area, water abstraction, treatment, storage and distribution infrastructure.

3. An enforcing authority must ensure that each monitoring programme prepared by it is reviewed on a continuous basis, and updated or reconfirmed at least every 5 years.

PART B

Standard parameters and frequencies

1.—(1) Each monitoring programme must take into account—

- (a) each parameter; and
- (b) any other micro-organism, parasite or substance which needs to be monitored by virtue of regulation 18(2) or (3),

including those that are important for assessing the impact of any part of a private water supply system on the quality of water at a point of compliance.

(2) When choosing appropriate parameters and other micro-organisms, parasites or substances for monitoring (as required by, or in accordance with, this schedule), local conditions for each private water supply system must be taken into consideration.

2.—(1) The following parameters ("Group A parameters") must be monitored at least at the minimum frequencies determined in accordance with the table in paragraph 3:—

- (a) *Escherichia coli*, coliform bacteria, colony count 22 °C, colour, turbidity, taste, odour, hydrogen ion concentration (pH), and conductivity; and
- (b) any other parameter, or other micro-organism, parasite or substance, (except radon, tritium and indicative dose) identified as relevant in the monitoring programme—

(i) by virtue of regulation 18(2) (as read with regulation 19(2)(a)); or

(ii) where relevant, through a risk assessment.

(2) Ammonium and nitrite must be included as Group A parameters, if chloramination is used.

(3) Aluminium and iron must be included as Group A parameters, if used as water treatment chemicals.

3.—(1) Other parameters, except radon, tritium and indicative dose, ("Group B parameters") must be monitored at least at the frequencies determined in accordance with the table below.

(2) In the table, "Group A parameters" is to be construed in accordance with paragraph 2.

distributed each day wi	vater (in m ³) or produced thin a supply es 1 and 2)	<i>Group A parameters:</i> number of samples per year	<i>Group B parameters:</i> number of samples per year
> 0	≤ 100	1	1
> 100	≤ 1,000	4	1
> 1,000	≤ 10,000	4 for the first 1,000 m ³ /day of the total volume, plus 3 for each additional 1,000 m ³ /day and part thereof	1 for the first 1,000 m ³ /day of the total volume, plus 1 for each additional 4,500 m ³ /day and part thereof
> 10,000	≤ 100,000	4 for the first 1,000 m ³ /day of the total volume, plus 3 for each additional 1,000 m ³ /day and part thereof	3 for the first 10,000 m ³ / day of the total volume, plus 1 for each additional 10,000 m ³ /day and part thereof
> 100,000		4 for the first 1,000 m ³ /day of the total volume, plus 3 for each additional 1,000 m ³ /day and part thereof	12 for the first 100,000 m ³ / day of the total volume, plus 1 for each additional 25,000 m ³ /day and part thereof

Minimum frequency of sampling and analysis for compliance monitoring

Note 1: The volumes are calculated as averages taken over a year.

Note 2: The number of inhabitants in a supply zone may be used instead of the volume of water to determine the minimum frequency, assuming water consumption of 0.2 m^3 /day per person.

4.—(1) A sample of water must be taken at least annually at a point of compliance for each private water supply system, and analysed for—

- (a) enterococci, *Escherichia coli*, coliform bacteria, colony count 22 °C, colour, turbidity, *Clostridium perfringens* and hydrogen ion concentration (pH);
- (b) copper, iron, lead, manganese, nickel and zinc;
- (c) where the water is supplied to premises within a nitrate vulnerable zone, nitrate; and
- (d) any other parameter, or other micro-organism, parasite or substance, identified (for the time being) as relevant in the monitoring programme in relation to a supply of water—
 - (i) by virtue of regulation 18(2) (as read with regulation 19(2)(a)); or
 - (ii) where relevant, through a risk assessment.

(2) In sub-paragraph (1) "nitrate vulnerable zone" means any area of land designated as a nitrate vulnerable zone by regulation 2 of the Designation of Nitrate Vulnerable Zones (Scotland) Regulations 2015(4).

⁽**4**) S.S.I. 2015/376.

PART C

Deviation from standard parameters and frequencies

1. An enforcing authority may (or, where required, must), in accordance with this Part, deviate from the requirements of paragraphs 2, 3 and 4 in Part B of this schedule.

2. Based on the results of a risk assessment, the list of parameters in Part B of this schedule (including any micro-organism, parasite or substance referred to in paragraph 2(1)(b) of that Part), must be extended and/or the minimum sampling frequencies under that Part increased if—

- (a) the list of parameters or frequencies required to be monitored under that Part B is not sufficient to fulfil the obligations imposed by regulation 18(1), (3) and (4);
- (b) additional monitoring is required by regulation 18(2); or
- (c) this is necessary to verify the matters in paragraph 1(a) of Part A of this schedule.

3. Subject to paragraph 4, based on the results of a risk assessment the list of parameters in Part B of this schedule (including any micro-organism, parasite or substance referred to in paragraph 2(1) (b) of that Part) and the sampling frequencies under that Part B may be reduced, provided that the following conditions are met:—

- (a) the frequency of sampling for *Escherichia coli* must not be reduced below the minimum frequency required by that Part B; and
- (b) for other parameters in the list—
 - (i) the location and frequency of sampling must be determined in relation to the parameter's origin, as well as the variability and long-term trend of its concentration, taking into account the water quality standards;
 - (ii) to reduce the minimum sampling frequency for a parameter under Part B of this schedule, the results obtained from samples collected at regular intervals over a period of at least 3 years from sampling points representative of the whole supply zone must all be less than 60 % of the parametric value;
 - (iii) to remove a parameter from the list of parameters to be monitored under Part B of this schedule, the results obtained from samples collected at regular intervals over a period of at least 3 years from points representative of the whole supply zone must all be less than 30 % of the parametric value; and
 - (iv) the removal of a parameter from the list of parameters to be monitored under Part B of this schedule must be based on the result of the risk assessment, informed by the results of monitoring of sources of water and confirming that human health is protected from the adverse effects of any contamination of water.

4.—(1) The minimum sampling frequency for a parameter under Part B of this schedule (including for a micro-organism, parasite or substance referred to in paragraph 2(1)(b) of that Part) may be reduced under paragraph 3(b)(ii) only if the risk assessment confirms that no factor (that can be reasonably anticipated) is likely to cause deterioration of the quality of the water.

(2) Any such parameter may be removed from the list of parameters to be monitored by an enforcing authority under paragraph 3(b)(iii) only if—

- (a) the risk assessment confirms that no factor (that can be reasonably anticipated) is likely to cause deterioration of the quality of the water; and
- (b) the Drinking Water Quality Regulator for Scotland, by notice to the enforcing authority, consents to the removal of the parameter from the list of parameters to be monitored in relation to a supply of water (or in relation to more than one supply of water), and that consent has not been revoked under sub-paragraph (3).

(3) The Drinking Water Quality Regulator for Scotland may, by notice to the enforcing authority, revoke with immediate effect any consent given by it under sub-paragraph (2)(b).

PART D

Sampling methods and sampling points

1.—(1) Sampling points, in relation to water, must be determined by the enforcing authority so as to ensure that the results of the analysis of discrete water samples collected at those points will establish whether or not the water meets the water quality standards at each point of compliance.

(2) In the case of a supply of water in pipes to any premises used for a commercial or public activity, the sampling points must include a point of compliance within each premises.

(3) In the case of a supply of water in pipes to premises (including any premises used for a commercial or public activity), an enforcing authority may take samples of the water within the supply zone or at a treatment works for a particular parameter—

- (a) if it can be demonstrated that there would be no adverse change to the measured value of the parameter concerned; and
- (b) in the case of any premises used for a commercial or public activity, the Drinking Water Quality Regulator for Scotland, by notice to the enforcing authority, consents to the samples being taken within the supply zone or at the treatment works for the particular parameter, and that consent has not been revoked under sub-paragraph (6).

(4) In a case where an enforcing authority may take samples of the water within the supply zone or at a treatment works for a particular parameter, the point at which the samples are taken is to be treated for the purposes of these Regulations as the point of compliance for the parameter.

(5) As far as possible, the number of samples must be distributed equally in time and location.

(6) The Drinking Water Quality Regulator for Scotland may, by notice to the enforcing authority, revoke with immediate effect any consent given by it under sub-paragraph (3)(b).

2. Subject to paragraph 1, sampling at the point of compliance must meet the following requirements:—

- (a) a sample for copper, lead or nickel must be taken at the consumer's tap without prior flushing;
- (b) a sample for any such parameter or any other chemical parameter must-
 - (i) be a random daytime sample of one litre volume; or
 - (ii) use a fixed stagnation time method that better reflects the national situation, provided that, at the supply zone level, this does not result in fewer cases of non-compliance than using the random daytime method; and
- (c) a sample for microbiological parameters at the point of compliance must be taken and handled in accordance with sampling purpose B of European standard EN ISO 19458:2006 entitled "*Water quality Sampling for microbiological analysis (ISO 19458:2006)*"(**5**).

3. Sampling of water in a private water supply system, with the exception of sampling at the consumer's tap, must be in accordance with international standard ISO 5667-5:2006 entitled *"Water quality. Sampling. Guidance on sampling of drinking water from treatment works and piped distribution systems"*(**6**).

⁽⁵⁾ This standard was approved by the European Committee for Standardization (CEN) on 1st July 2006. Under reference BS EN ISO 19458, it is published as a UK standard by the British Standards Institution (ISBN 0 580 49136 6).

⁽⁶⁾ This standard was approved by the International Organization for Standardization (ISO). Under reference BS ISO 5667-5:2006, it is published as a UK standard by the British Standards Institution (ISBN 0 580 47140 3).

4. For microbiological parameters, sampling of water in a private water supply system must be taken and handled in accordance with sampling purpose A of European standard EN ISO 19458:2006 entitled "*Water quality - Sampling for microbiological analysis (ISO 19458:2006)*".

PART E

Radioactive substances

General principles and monitoring frequencies

1.—(1) Subject to sub-paragraph (2), each enforcing authority in relation to a supply of water must ensure that the water is monitored for radon, tritium and indicative dose.

(2) Where the Scottish Ministers, by notice to the enforcing authority, confirm that they have established that radon, tritium or, as the case may be, indicative dose is not likely to be present in relation one or more supplies of water, for a period specified in the notice, in concentrations which could exceed the parametric value for the parameter, the enforcing authority is not required to monitor any such supply of water for the parameter during the period specified.

- (3) In case of naturally occurring radionuclides—
 - (a) where previous results show that the concentration of radionuclides in one or more supplies of water is stable, the minimum sampling and analysis frequencies are to be decided by the Scottish Ministers, and confirmed by notice to the enforcing authority, taking into consideration the risk to human health; and
 - (b) where the Scottish Ministers, by notice to the enforcing authority, confirm that they are satisfied (on the basis of representative surveys, monitoring data or other reliable information) that levels of radon, tritium and the calculated indicative dose in one or more supplies of water will, for a period specified in the notice, remain below the parametric value for each parameter at the point of compliance, the enforcing authority is not required to monitor any such supply for these parameters during the period specified.

(4) Where sub-paragraph (3)(b) applies, the Scottish Ministers must communicate the grounds for the decision to the European Commission and provide the Commission with the necessary documentation supporting that decision, including the findings of any surveys, monitoring or investigations carried out.

Radon

2.—(1) Subject to paragraphs 5 and 6, the enforcing authority must ensure that representative surveys are undertaken to determine the scale and nature of likely exposures to radon in the water originating from different types of ground water sources and wells in different geological areas.

(2) The surveys must be designed in such a way that underlying factors, and especially 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.

(3) Monitoring of radon concentrations must be carried out if the enforcing authority has 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.

Tritium

3.—(1) Subject to paragraphs 5 and 6, the enforcing authority must monitor the water for tritium where—

- (a) an anthropogenic source of tritium or other artificial radionuclides is present within the catchment area for the supply; and
- (b) it cannot be shown on the basis of other surveillance programmes or investigations that the level of tritium is below the parametric value for tritium.

(2) Where monitoring for tritium is required by sub-paragraph (1), samples must be taken in accordance with paragraph 6.

(3) If the concentration of tritium in any such sample exceeds the parametric value for tritium, the enforcing authority must carry out an investigation of the presence of other artificial radionuclides.

Indicative dose

4.—(1) The enforcing authority must monitor the water for indicative dose where—

- (a) a source of artificial radioactivity or elevated natural radioactivity is present; and
- (b) it cannot be shown on the basis of other representative monitoring programmes or other investigations that the indicative dose is below the parametric value for that parameter.

(2) Where sub-paragraph (1) requires monitoring (of radionuclide levels) only in relation to a source of artificial radioactivity, samples must be taken in accordance with paragraph 6.

(3) Where sub-paragraph (1) requires monitoring (of radionuclide levels) in relation to a source of elevated natural radioactivity, the enforcing authority must determine the frequency of the monitoring required of—

- (a) gross alpha activity;
- (b) gross beta activity; or
- (c) individual natural radionuclides,

depending on the screening strategy adopted pursuant to Part B of this schedule.

(4) Where sub-paragraph (3) applies, the frequency determined may vary from a single check measurement to the frequency which would otherwise apply by virtue of paragraph 6.

(5) Where a single check for natural radioactivity is specified under sub-paragraph (3), the enforcing authority must carry out a further check if any change occurs in relation to the supply which is likely to influence the concentrations of radionuclides in the supply.

Water treatment

5. Where the water is treated to reduce the level of radionuclides, the enforcing authority must monitor the water for indicative dose, radon and tritium in accordance with paragraph 6 to verify the continued efficacy of that treatment.

Minimum sampling and analysis frequencies

6. The minimum sampling and analysis frequency for the monitoring of radon, tritium and indicative dose in water (where required by this schedule) from a private water supply system or from a tanker or used in a food production undertaking is set out in the following table.

Volume of water (in m ³) distributed or produced each day within a supply zone (Note 1)		Number of samples per year
		(Notes 2 and 3)
> 0 ≤ 100		1
> 100 ≤ 1,000		1

	³) distributed or produced supply zone (Note 1)	Number of samples per year (Notes 2 and 3)
> 1,000	≤ 10,000	1, plus 1 for each 3,300 m^3/day and part thereof of the total volume
> 10,000	≤ 100,000	3, plus 1 for each 10,000 m^3/day and part thereof of the total volume
> 100,000		10, plus 1 for each 25,000 m^3/day and part thereof of the total volume

Note 1: The volumes are calculated as averages taken over a year. The number of inhabitants in a supply zone may be used instead of the volume of water to determine the minimum frequency, assuming water consumption of 200 litres/day per person.

Note 2: As far as possible, the number of samples must be distributed equally in time and location.

Note 3: In the event of intermittent short-term supply the monitoring frequency of water distributed by tankers must be decided by each enforcing authority in relation to the water.

Averaging

7. Where the parametric value for radon, tritium or, as the case may be, indicative dose is exceeded in a sample of the water, the Drinking Water Quality Regulator for Scotland must specify, by notice to the enforcing authority, the extent of resampling necessary to ensure that the measured values are representative of an average activity concentration for a full year.

PART F

Indicative dose

Monitoring for compliance with the indicative dose

1.—(1) Each enforcing authority, in relation to water, may use reliable screening strategies to indicate the presence of radioactivity in the water.

- (2) These strategies may include screening for-
 - (a) certain radionuclides or an individual radionuclide; or
 - (b) gross alpha activity or gross beta activity.

Screening for certain radionuclides or for an individual radionuclide

2.—(1) Where screening of the water is carried out for certain radionuclides or for an individual radionuclide, the enforcing authority must carry out an analysis of additional radionuclides if, in relation to any supply referred to in paragraph 1—

- (a) one of the activity concentrations of a radionuclide in the second column of the table below exceeds 20% of the corresponding derived concentration in the third column; or
- (b) the tritium concentration exceeds the parametric value for tritium.

(2) The enforcing authority must, in deciding which radionuclides require to be measured for each supply, take into account all relevant information about likely sources of radioactivity.

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

Note 1: This table includes values for the most common natural and artificial radionuclides. These are precise values, calculated for a dose of 0.1 mSv, an annual intake of 730 litres and using the dose coefficients laid down in Table (A) of Annex III to Council Directive 96/29/Euratom laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation(7). Derived concentrations for other radionuclides may be calculated on the same basis.

Note 2: This allows only for the radiological properties of uranium, not for its chemical toxicity.

Screening for gross alpha activity and gross beta activity

3.—(1) The enforcing authority may use screening strategies for gross alpha activity and gross beta activity (or, where appropriate, residual beta activity after subtraction of the potassium-40 activity) to monitor the water for indicative dose.

(2) Subject to sub-paragraph (3), screening levels must be set at-

- (a) 0.1 Bq/l for gross alpha activity; and
- (b) 1.0 Bq/l for gross beta activity.

(3) The enforcing authority may set alternative levels to those specified in sub-paragraph (2) if it can demonstrate that these will ensure that an indicative dose of 0.1 mSv is not exceeded.

(4) If the gross alpha activity is less than 0.1 Bq/l and the gross beta activity is less than 1.0 Bq/l, the enforcing authority may assume that the indicative dose is less than 0.1 mSv.

(5) Where sub-paragraph (4) applies, the enforcing authority is not required to carry out a radiological investigation unless it is aware—

(a) that specific radionuclides are present in the water; and

⁽⁷⁾ OJ L 159, 29.6.1996, p. 1., as amended by Corrigendum (OJ L 314, 4.12.1996, p. 20).

(b) that these are liable to cause an indicate dose in excess of 0.1 mSv.

(6) If the gross alpha activity exceeds 0.1 Bq/l or the gross beta activity exceeds 1.0 Bq/l, the enforcing authority must carry out an analysis for specific radionuclides.

(7) The enforcing authority must, in deciding which radionuclides require to be measured for the purposes of sub-paragraph (6), take into account all relevant information about likely sources of radioactivity.

(8) If elevated levels of tritium are detected in a sample, the enforcing authority must also measure the gross alpha activity and gross beta activity in that sample.

Calculation of the indicative dose

4.—(1) The indicative dose must be calculated from—

- (a) the measured radionuclide concentrations and the dose coefficients laid down in Table (A) of Annex III to Council Directive 96/29/Euratom laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation; or
- (b) more recent information recognised by the Scottish Ministers,

on the basis of an annual intake of water of 730 litres for adults.

(2) Where the following formula is satisfied, the enforcing authority may assume that the indicative dose is less than 0.1 mSv and that no further investigation is required:—

$$\sum_{i=l}^{n} \frac{Ci (obs)}{Ci (der)} \leq 1$$

where---

"*C_i (obs)*" refers to the observed concentration of radionuclide "*i*";

" C_i (der)" refers to derived concentration of radionuclide "i"; and

"*n*" refers to the number of radionuclides detected.

SCHEDULE 4

Regulation 20(1) and (2)

METHODS OF ANALYSIS

1.—(1) The enforcing authority must ensure that the methods of analysis used for the purposes of monitoring and demonstrating compliance with these Regulations are validated and documented in accordance with European standard EN ISO/IEC 17025:2005 entitled "*General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:2005)*"(**8**), or other equivalent standards accepted at international level.

(2) The enforcing authority must ensure that laboratories or parties contracted by laboratories apply quality management system practices in accordance with European standard EN ISO/ IEC 17025:2005 entitled "General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:2005)", or other equivalent standards accepted at international level.

2. In the absence of an analytical method meeting the minimum performance criteria set out in Part B of this schedule, the enforcing authority must ensure that monitoring is carried out using best available techniques not entailing excessive costs.

⁽⁸⁾ This standard was approved by the European Committee for Standardization (CEN) on 15th March 2005. Under reference BS EN ISO/IEC 17025:2005, it is published as a UK standard by the British Standards Institution (ISBN 0 580 46330 3).

PART A

Microbiological parameters

1.—(1) Subject to sub-paragraph (2), the methods in paragraph 2 are given for reference.

(2) The enforcing authority may use other methods, providing the provisions of regulation 20 are met.

2. The methods for microbiological parameters are—

- (a) for *Escherichia coli* and coliform bacteria—
 - (i) European standard EN ISO 9308-1:2014 entitled "Water quality Enumeration of Escherichia coli and coliform bacteria Part 1: Membrane filtration method for waters with low bacterial background flora (ISO 9308-1:2014)"(9); or
 - (ii) European standard EN ISO 9308-2:2014 entitled "Water quality Enumeration of Escherichia coli and coliform bacteria - Part 2: Most probable number method (ISO 9308-2:2012)"(10);
- (b) for enterococci, European standard EN ISO 7899-2:2000 entitled "Water quality -Detection and enumeration of intestinal enterococci - Part 2: Membrane filtration method (ISO 7899-2:2000)"(11);
- (c) for Pseudomonas aeruginosa, European standard EN ISO 16266:2008 entitled "Water quality - Detection and enumeration of Pseudomonas aeruginosa - Method by membrane filtration (ISO 16266:2006)"(12);
- (d) for colony count 22 °C (the enumeration of culturable microorganisms colony count after aerobic incubation at 22 °C), European standard EN ISO 6222:1999 entitled "*Water quality Enumeration of culturable micro-organisms Colony count by inoculation in a nutrient agar culture medium (ISO 6222:1999)*"(13); and
- (e) for *Clostridium perfringens* including spores, European standard EN ISO 14189:2016 entitled "*Water quality - Enumeration of Clostridium perfringens - Method using membrane filtration (ISO 14189:2013)*"(14).

PART B

Chemical and indicator parameters

1.—(1) Subject to paragraph 3, for a parameter in Table 1, the method of analysis used must, as a minimum, be capable of measuring concentrations equal to the parametric value for the parameter with—

(a) a limit of quantification of 30 % or less of the parametric value; and

⁽⁹⁾ This standard was approved by the European Committee for Standardization (CEN) on 18th January 2017. Under reference BS EN ISO 9308-1:2014+A1:2017, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 92379 1).

⁽¹⁰⁾ This standard was approved by the European Committee for Standardization (CEN) on 11th April 2014. Under reference BS EN ISO 9308-2:2014, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 84023 4).

⁽¹¹⁾ This standard was approved by the European Committee for Standardization (CEN) on 11th April 2014. Under reference BS EN ISO 7899-2:2000, it is published as a UK standard by the British Standards Institution (ISBN 0 580 34953 5).

⁽¹²⁾ This standard was approved by the European Committee for Standardization (CEN) on 11th January 2008. Under reference BS EN ISO 16266:2008, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 59736 7).

⁽¹³⁾ This standard was approved by the European Committee for Standardization (CEN) on 16th March 1999. Under reference BS EN ISO 6222:1999, it is published as a UK standard by the British Standards Institution (ISBN 0 580 32495 8).

⁽¹⁴⁾ This standard was approved by the European Committee for Standardization (CEN) on 15th July 2016. Under reference BS EN ISO 14189:2016, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 92184 1).

(b) an uncertainty of measurement as specified in Table 1.

(2) The result of the analysis for a parameter in Table B or Table C must be expressed using at least the same number of significant figures as the parametric value for the parameter in the table.

2. The uncertainty of measurement specified in Table 1 must not be used as an additional tolerance to the parametric values.

3. Until 31st December 2019, the enforcing authority may, for a parameter in Table 2, use the corresponding 'trueness', 'precision' and 'limit of detection' in that table as an alternative set of performance characteristics (instead of using the limit of quantification and the uncertainty of measurement referred to in paragraph 1(1)).

TABLE 1

Parameter Uncertainty of measurement Notes(15) (% of parametric value, except pH) (Note 1) Aluminium 25 Ammonium 40 Antimony 40 Arsenic 30 50 Benzo(a)pyrene Note 5 Benzene 40 Boron 25 Bromate 40 Cadmium 25 15 Chloride Chromium 30 Conductivity 20 Copper 25 Cyanide 30 Note 6 1,2-dichloroethane 40 Fluoride 20 Hydrogen ion 0.2 Note 7 concentration (in pH) 30 Iron

Minimum performance characteristic: uncertainty of measurement

(15)

Lead

Manganese

Acrylamide, epichlorohydrin and vinyl chloride to be controlled by product specification.

25 30

Parameter	Uncertainty of measurement	Notes(15)
	(% of parametric value, except pH) (Note 1)	
Mercury	30	
Nickel	25	
Nitrate	15	
Nitrite	20	
Oxidisability	50	Note 8
Pesticides	30	Note 9
Polycyclic aromatic hydrocarbons	30	Note 10
Selenium	40	
Sodium	15	
Sulphate	15	
Tetrachloroethene	30	Note 11
Trichloroethene	40	Note 11
Trihalomethanes: total	40	Note 10
Total organic carbon	30	Note 12
Turbidity	30	Note 13

TABLE 2

Minimum performance characteristics: trueness, precision and limit of detection

Parameter	Trueness	Precision	Limit of detection	Notes(16)
	(% of parametric value, except for pH) (Note 2)	(% of parametric value, except for pH) (Note 3)	(% of parametric value, except for pH) (Note 4)	
Aluminium	10	10	10	
Ammonium	10	10	10	
Antimony	25	25	25	
Arsenic	10	10	10	
Benzo(a)pyrene	25	25	25	
Benzene	25	25	25	
Boron	10	10	10	

⁽¹⁵⁾ (16)

Acrylamide, epichlorohydrin and vinyl chloride to be controlled by product specification. Acrylamide, epichlorohydrin and vinyl chloride to be controlled by product specification.

Parameter	Trueness	Precision	Limit of detection	Notes(16)
	(% of	(% of		
	parametric	parametric	(% of	
	value, except for pH) (Note 2)	value, except for pH) (Note 3)	parametric	
	<i>p11)</i> (<i>Note 2</i>)	<i>p11)</i> (<i>Note</i> 3)	value, except for pH) (Note 4)	
Bromate	25	25	25	
Cadmium	10	10	10	
Chloride	10	10	10	
Chromium	10	10	10	
Conductivity	10	10	10	
Copper	10	10	10	
Cyanide	10	10	10	Note 6
1,2-dichloroethane	25	25	10	
Fluoride	10	10	10	
Hydrogen ion concentration (in pH)	0.2	0.2		Note 7
Iron	10	10	10	
Lead	10	10	10	
Manganese	10	10	10	
Mercury	20	10	20	
Nickel	10	10	10	
Nitrate	10	10	10	
Nitrite	10	10	10	
Oxidisability	25	25	25	Note 8
Pesticides	25	25	25	Note 9
Polycyclic aromatic hydrocarbons	25	25	25	Note 10
Selenium	10	10	10	
Sodium	10	10	10	
Sulphate	10	10	10	
Tetrachloroethene	25	25	10	Note 11
Trichloroethene	25	25	10	Note 11
Trihalomethanes: total	25	25	10	Note 10
Turbidity	25	25	25	

Acrylamide, epichlorohydrin and vinyl chloride to be controlled by product specification. $19\,$

Notes to Table 1 and Table 2

Note 1: Uncertainty of measurement is a non-negative parameter characterising the dispersion of the quantity values being attributed to a measurand, based on the information used. The performance criterion for measurement uncertainty (k = 2) is the percentage of the parametric value stated in the table or better. Measurement uncertainty must be estimated at the level of the parametric value, unless otherwise specified.

Note 2: Trueness is a measure of systematic error, i.e. the difference between the mean value of the large number of repeated measurements and the true value. Further specifications are those set out in international standard ISO 5725 entitled "Accuracy (trueness and precision) of measurement methods and results" (17).

Note 3: Precision is a measure of random error and is usually expressed as the standard deviation (within and between batches) of the spread of results from the mean. Acceptable precision is twice the relative standard deviation. This term is further specified in international standard ISO 5725 entitled partly "Accuracy (trueness and precision) of measurement methods and results".

Note 4: Limit of detection is either three times the standard deviation within a batch of a natural sample containing a low concentration of the parameter, or five times the standard deviation of a blank sample (within a batch).

Note 5: If the value of uncertainty of measurement cannot be met, the best available technique should be selected (up to 60 %).

Note 6: The method determines total cyanide in all forms.

Note 7: Values for trueness, precision and uncertainty of measurement are expressed in pH units.

Note 8: Reference method European standard EN ISO 8467:1995 entitled "Water quality - Determination of permanganate index (ISO 8467:1993)"(18).

Note 9: 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.

Note 10: The performance characteristics apply to individual substances, specified at 25 % of the parametric value in Table B.

Note 11: The performance characteristics apply to individual substances, specified at 50 % of the parametric value in Table B.

Note 12: The uncertainty of measurement should be estimated at the level of 3 mg/l of the total organic carbon in accordance with European standard EN 1484:1997 entitled "*Water analysis - Guidelines for the determination of total organic carbon and dissolved organic carbon*"(19).

Note 13: The uncertainty of measurement must be estimated at the level of 1.0 nephelometric turbidity units in accordance with European standard EN ISO 7027-1:2016 entitled "*Water quality* - *Determination of turbidity - Part 1: Quantitative methods (ISO 7027-1:2016)*"(**20**).

⁽¹⁷⁾ This standard has been approved by the International Organization for Standardization (ISO). Under reference BS ISO 5725-1 to BS ISO 5725-6, these are published as UK standards by the British Standards Institution.

⁽¹⁸⁾ This standard was approved by the European Committee for Standardization (CEN) on 3rd November 1994. Under reference EN ISO 8467:1995, it is published as a UK standard by the British Standards Institution (ISBN 0 580 23435 5).

⁽¹⁹⁾ This standard was approved by the European Committee for Standardization (CEN) on 6th April 1997. Under reference BS EN 1484:1997, it is published as a UK standard by the British Standards Institution (ISBN 0 580 28372 0).

⁽²⁰⁾ This standard was approved by the European Committee for Standardization (CEN) on 15th April 2016. Under reference BS EN ISO 7027-1:2016, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 81961 2).

PART C

Indicative dose

For each parameter in Table 3, the method of analysis used must be capable of measuring activity concentrations with at least the limit of detection specified for that parameter in the second column of that table.

TABLE 3

Minimum performance characteristics: limit of detection

Parameter	<i>Limit of detection (in Bq/l) (Notes 1 and 2)</i>	Notes
Tritium	10	Note 3
Radon	10	Note 3
gross alpha activity	0.04	Note 4
gross beta activity	0.4	Note 4
U-238	0.02	
U-234	0.02	
Ra-226	0.04	
Ra-228	0.02	Note 5
Pb-210	0.02	
Po-210	0.01	
C-14	20	
Sr-90	0.4	
Pu-239 / Pu-240	0.04	
Am-241	0.06	
Co-60	0.5	
Cs-134	0.5	
Cs-137	0.5	
I-131	0.5	

Notes to Table 3

Note 1: The limit of detection must be calculated in accordance with the international standard ISO 11929:2010 entitled "Determination of the characteristic limits (decision threshold, detection limit and limits of the confidence interval) for measurements of ionising radiation - Fundamentals and application" (21), with probabilities of errors of 1st and 2nd kind of 0.05 each.

Note 2: Measurement uncertainties must be calculated and reported as complete standard uncertainties, or as expanded standard uncertainties with an expansion factor of 1.96, in accordance

⁽²¹⁾ This standard has been approved by the International Organization for Standardization (ISO). Under reference BS ISO 11929:2010, it is published as a UK standard by the British Standards Institution (ISBN 978 0 580 59044 3).

with international standard ISO/IEC Guide 98-3:2008 entitled "Guide to the expression of uncertainty in measurement" (22).

Note 3: The limit of detection for tritium and for radon is 10% of the corresponding parametric value for the parameter.

Note 4: The limit of detection for gross alpha activity and gross beta activities is 40% of the screening values of 0.1 Bq/l and 1.0 Bq/l respectively.

Note 5: This limit of detection applies only to initial screening for indicative dose for a new water source. If initial checking indicates that it is unlikely that Ra-228 exceeds 20% of the derived concentration, the limit of detection may be increased to 0.08 Bq/l for routine Ra-228 nuclide specific measurements, until a subsequent re-check is required.

SCHEDULE 5

Regulations 3(1) and 15

DEROGATIONS

Application

1.—(1) A water supplier who introduces water into, or uses, a private water supply system for the purposes of supplying water to the premises of another person may, in respect of the water supplied, make an application in writing to the enforcing authority (in relation to the water) for a derogation from a parametric value in Table B.

(2) In relation to a supply of water to premises in the area of an enforcing authority, a person who owns or occupies the premises may make an application in writing to the enforcing authority for a derogation from a parametric value in Table B.

(3) The application must include the things referred to in paragraph 3(3)(a) to (f).

Notification of decision

2.—(1) The enforcing authority may, by notice to the applicant, either—

- (a) refuse to grant a derogation; or
- (b) subject to paragraph 3, grant a derogation.

(2) The enforcing authority must, as soon as practicable after giving the notice to the applicant, send a copy of the notice to the Drinking Water Quality Regulator for Scotland.

Conditions

3.—(1) A derogation may only be granted—

- (a) if it does not pose a potential danger to human health;
- (b) the supply of water in question cannot be maintained by any other reasonable means; and
- (c) it is limited to as short a period as possible (up to a maximum period of 3 years).
- (2) If the enforcing authority refuses to grant a derogation, it must give reasons in the notice.
- (3) If the enforcing authority grants a derogation, it must specify in the notice—
 - (a) the grounds for the derogation;

⁽²²⁾ This standard has been approved by the International Organization for Standardization (ISO). Under reference ISO/IEC Guide 98-3:2008 Ed 1, it is published as a UK standard by the British Standards Institution.

- (b) the parameter concerned, previous relevant monitoring results, and the maximum permissible value under the derogation;
- (c) the geographical area, the quantity of water supplied each day, the population concerned and whether or not any relevant food-production undertaking would be affected;
- (d) an appropriate monitoring scheme, with an increased monitoring frequency where necessary;
- (e) a summary of the plan for the necessary remedial action, including a timetable for the work and an estimate of the cost and provisions for reviewing; and
- (f) the duration of the derogation.

(4) Before the end of the duration of a derogation (granted under this regulation), the enforcing authority must carry out a review to determine whether sufficient progress has been made (in relation to the plan and timetable for the necessary remedial action).

Second derogation

4.—(1) The enforcing authority may, if appropriate, grant a further derogation ("second derogation") from a parametric value of up to 3 years in respect of water supplied to premises if—

- (a) a derogation from the parametric value ("first derogation") was previously granted; and
- (b) the first derogation was in respect of water supplied to the same premises.
- (2) Paragraphs 1 to 3 apply to a second derogation as they apply to a first derogation.

Supplementary

5.—(1) If the enforcing authority considers that a failure to meet a parametric value was trivial, and if action taken in accordance with regulation 21(c) is sufficient to remedy the problem within 30 days, paragraph 3(3) does not apply and the enforcing authority must instead specify in the notice only—

- (a) the maximum permissible value under the derogation; and
- (b) the time allowed to remedy the problem.

(2) Sub-paragraph (1) does not apply if a failure to comply with a parametric value for a given water supply has occurred on more than 30 days on aggregate during the previous 12 months.

Notification

- 6. Where a derogation is granted to an applicant, the applicant must ensure—
 - (a) that the population affected by any such derogation is promptly informed in an appropriate manner of the derogation and of the conditions governing it; and
 - (b) where necessary, that advice is given to particular population groups for which the derogation could present a special risk.

SCHEDULE 6

Regulations 3(1), 30,33(1) and 34(1)

REMEDIATION NOTICES

Power to serve remediation notice

1.—(1) Where the enforcing authority reasonably believes that a supply of water to a point of compliance in its area—

- (a) poses a potential danger to human health;
- (b) has failed to meet one or more of the water quality standards and the failure is likely to recur; or
- (c) is failing to meet one or more of the water quality standards and the failure is likely to continue or to recur or both,

the enforcing authority may serve a remediation notice on a person who is, in relation to the supply of water, a relevant person.

- (2) In considering whether to serve remediation notice the enforcing authority may consult—
 - (a) the local authority for any area affected by the supply of water; and
 - (b) the Health Board for any such area.
- (3) A remediation notice must specify—
 - (a) the supply of water to which it relates;
 - (b) the enforcing authority's reasons for believing (as the case may be) that the supply of water—
 - (i) poses a potential danger to human health;
 - (ii) has failed to meet one or more of the water quality standards and the failure is likely to recur; or
 - (iii) is failing to meet one or more of the water quality standards and the failure is likely to continue or to recur or both;
 - (c) the steps which the enforcing authority requires the person to take for the purposes of—
 - (i) protecting human health (including, where appropriate, action to prohibit the supply of water or to restrict its use, or to provide an alternative supply of water);
 - (ii) restoring the quality of the water supplied, or to be supplied, so that it meets (and continues to meet) the water quality standards; or
 - (iii) protecting the quality of the water supplied, or to be supplied, (including its source) so that it meets (and continues to meet) the water quality standards; and
 - (d) the date on which the notice is to take effect.

(4) A remediation notice may specify different dates by which different steps specified under sub-paragraph (3)(c) must be completed.

(5) The date referred to in sub-paragraph (3)(d) must be no earlier than the day following the last day on which an appeal may be brought under paragraph 2(1).

(6) The enforcing authority must—

(a) send a copy of the remediation notice to the Drinking Water Quality Regulator for Scotland and to any local authority or Health Board consulted by the enforcing authority under subparagraph (2); and (b) arrange for the notice to be published in such manner as the enforcing authority thinks appropriate for bringing it to the attention of persons affected, or who may be affected, by the supply of water.

Right of appeal against remediation notice

2.—(1) A person on whom a remediation notice has been served may, within a period of 14 days beginning with the date of service, appeal to the sheriff against the notice.

(2) Where an appeal is brought under sub-paragraph (1) the remediation notice is of no effect until the appeal is withdrawn or finally determined.

- (3) On an appeal under sub-paragraph (1) the sheriff may make such order as the sheriff thinks fit.
- (4) The decision of the sheriff on such an appeal is final.

(5) Where a person has taken the steps required by a remediation notice, the enforcing authority must publish (or arrange for the publication of) information to this effect, in such a manner as the enforcing authority thinks appropriate for bringing it to the attention of persons affected, or who may have been affected, by the supply of water.

Failure to comply with remediation notice

3.—(1) This paragraph applies where, in relation to a remediation notice, a person fails to complete a step specified under paragraph 1(3)(c) by a date specified in relation to that step under paragraph 1(4) (or by such later date as the enforcing authority may have substituted under regulation 33(1)(b)).

- (2) Where this paragraph applies, the enforcing authority may—
 - (a) enter any premises and carry out the work necessary to complete the step; and
 - (b) recover from the person any expenses which the enforcing authority reasonably incurs in carrying out, or securing the carrying out, of that work.

(3) The expenses which may be recovered under sub-paragraph (2)(b) include such proportion of the enforcing authority's administrative expenses (including expenses incurred in establishing any of the matters referred to in paragraph 1(1)(a) to (c) and in connection with the remediation notice) as the enforcing authority considers appropriate.

Offences in relation to remediation notice

4.—(1) A person commits an offence if the person fails to do anything which a remediation notice requires the person to do (including a failure to complete a step required by a specified date).

(2) A person commits an offence if a person intentionally obstructs a person acting in the exercise of any power conferred by paragraph 3(2)(a).

(3) A person who commits an offence under sub-paragraph (1) or (2) is liable—

- (a) on summary conviction, to a fine not exceeding the statutory maximum; or
- (b) on conviction on indictment, to a fine.

SCHEDULE 7

Regulations 3(1), 31,33(1) and 34(1)

ENFORCEMENT NOTICES

Power to serve enforcement notice

1.—(1) Where the enforcing authority reasonably believes, in respect of a supply of water to a point of compliance in its area—

- (a) that a person has contravened a requirement of these Regulations and the contravention is likely to recur; or
- (b) that a person is contravening a requirement of these Regulations and the contravention is likely to continue or to recur or both,

and (in either case) that the person is not taking appropriate steps for the purpose of rectifying the contravention or (as the case may be) preventing its recurrence, the enforcing authority may serve on the person an enforcement notice.

- (2) In considering whether to serve an enforcement notice the enforcing authority may consult—
 - (a) the local authority for any area affected by the contravention; and
 - (b) the Health Board for any such area.

(3) An enforcement notice must specify—

- (a) the contravention to which it relates;
- (b) the enforcing authority's reasons for believing (as the case may be) that the contravention—
 - (i) has occurred and is likely to recur; or
 - (ii) is occurring and is likely to continue or to recur or both;
- (c) the date by which the person is required to rectify the contravention or (as the case may be) take steps to prevent its recurrence;
- (d) any particular steps which the enforcing authority requires the person to take for that purpose; and
- (e) the date on which the notice is to take effect.

(4) An enforcement notice may specify different dates by which different steps specified under sub-paragraph (3)(d) must be completed.

(5) The date referred to in paragraph (3)(e) must be no earlier than the day following the last day on which an appeal may be brought under paragraph 2(1).

(6) The enforcing authority must—

- (a) send a copy of an enforcement notice to the Drinking Water Quality Regulator for Scotland and to any local authority or Health Board consulted by the enforcing authority under subparagraph (2); and
- (b) arrange for the notice to be published in such manner as the enforcing authority thinks appropriate for bringing it to the attention of persons affected, or who may be affected, by the contravention.
- (7) In sub-paragraph (1), the references to "person" do not include—
 - (a) an enforcing authority;
 - (b) the Drinking Water Quality Regulator for Scotland; or
 - (c) the Scottish Ministers.

Right of appeal against enforcement notice

2.—(1) A person on whom an enforcement notice has been served may, within a period of 14 days beginning with the date of service, appeal to the sheriff against the notice.

(2) Where an appeal is brought under sub-paragraph (1) the enforcement notice is of no effect until the appeal is withdrawn or finally determined.

- (3) On an appeal under sub-paragraph (1) the sheriff may make such order as the sheriff thinks fit.
- (4) The decision of the sheriff on such an appeal is final.

(5) Where a person has rectified the contravention specified in an enforcement notice, the enforcing authority must publish (or arrange for the publication of) information to this effect, in such a manner as the enforcing authority thinks appropriate for bringing it to the attention of persons affected, or who may have been affected, by the contravention.

Failure to comply with enforcement notice

3.—(1) This paragraph applies where, in relation to an enforcement notice, a person—

- (a) fails to rectify, or (as the case may be) to take steps to prevent the recurrence of, a contravention specified in the notice by the date specified in relation to the contravention under paragraph 1(3)(c); or
- (b) fails to complete a step specified under paragraph 1(3)(d) by a date specified in relation to that step under paragraph 1(4),

(or, in either case, by such later date as the enforcing authority may have substituted under regulation 33(1)(b)).

(2) Where this paragraph applies, the enforcing authority may—

- (a) enter any premises and carry out the work necessary to rectify or prevent the recurrence of the contravention or, as the case may be, to complete the step; and
- (b) recover from the person any expenses which the enforcing authority reasonably incurs in carrying out, or securing the carrying out, of that work.

(3) The expenses which may be recovered under sub-paragraph (2)(b) include such proportion of the enforcing authority's administrative expenses (including expenses incurred in establishing the contravention and in connection with the enforcement notice) as the enforcing authority considers appropriate.

Offences in relation to enforcement notice

4.—(1) A person commits an offence if the person fails to do anything which an enforcement notice requires the person to do (including a failure to complete a step required by a specified date).

(2) A person commits an offence if the person intentionally obstructs a person acting in the exercise of any power conferred by paragraph 3(2)(a).

(3) A person who commits an offence under sub-paragraph (1) or (2) is liable—

- (a) on summary conviction, to a fine not exceeding the statutory maximum; or
- (b) on conviction on indictment, to a fine.

SCHEDULE 8

Regulation 34

POWERS OF ENTRY ETC .: FURTHER PROVISION

Notice of entry

1.—(1) Sub-paragraphs (2) to (4) apply to the powers conferred on an enforcing authority by virtue of—

- (a) regulation 29(1);
- (b) paragraph 3(2)(a) of schedule 6;
- (c) paragraph 3(2)(a) of schedule 7; and
- (d) regulation 32(3)(a),

(in this schedule referred to as "the relevant provisions").

(2) An enforcing authority is entitled to demand entry into any premises as of right by virtue of the relevant provisions only at a reasonable time, except in an emergency.

(3) Unless the premises are premises (other than a dwelling) of a water supplier, the enforcing authority must give 24 hours' notice of the intended entry to the occupier of the premises.

(4) The powers are exercisable on behalf of an enforcing authority by any person designated in writing by the enforcing authority as a person who may exercise the powers on its behalf.

Warrant to exercise right or power

2.—(1) If a sheriff or a justice of the peace is satisfied, by evidence on oath, that—

- (a) there are reasonable grounds for the exercise in relation to any premises of a power conferred by the relevant provisions; and
- (b) one or more of the conditions specified in sub-paragraph (2) is fulfilled in relation to those premises,

the sheriff or justice may by warrant authorise the enforcing authority to exercise the power in relation to those premises in accordance with the warrant and, if need be, by force.

(2) The conditions mentioned in sub-paragraph (1) are—

- (a) that the exercise of the power in relation to the premises has been refused;
- (b) that such a refusal is reasonably apprehended;
- (c) that the premises are unoccupied;
- (d) that the occupier is temporarily absent from the premises;
- (e) that the case is one of urgency;
- (f) that an application for admission to the premises would defeat the object of the proposed entry.

(3) A sheriff or justice must not issue a warrant under this schedule by virtue only of being satisfied that a condition specified in sub-paragraph (2)(a) or (b) is fulfilled unless the sheriff or justice is also satisfied—

- (a) that notice of the intention to apply for the warrant has been given to the occupier of the premises, or
- (b) that the giving of such notice would defeat the object of the proposed entry.

(4) A warrant under this schedule continues in force until the purposes for which the warrant was issued have been fulfilled.

Evidence of authority

3. A person entitled to exercise any power conferred by the relevant provisions must, if required to do so, produce written evidence of that entitlement.

Supplementary powers

4. A person entitled to enter any premises by virtue of any power conferred by the relevant provisions is entitled, subject in the case of a power exercisable under a warrant to the terms of the warrant, to take on to the premises such other persons and such equipment as may be necessary.

Duty to secure premises

5. A person who enters any premises in the exercise of any power conferred by the relevant provisions must leave the premises as effectually secured against trespassers as that person found them.

Compensation

6.—(1) Where any person ("the person") exercises, on behalf of an enforcing authority, any power conferred by the relevant provisions, the enforcing authority must make full compensation to any other person who has sustained loss or damage by reason of—

- (a) the exercise by the person of that power or of any power to take any person or equipment on to the premises in relation to which the power is exercised; or
- (b) the performance of, or failure of the person to perform, the duty imposed by paragraph 5.

(2) Compensation is not payable by virtue of sub-paragraph (1) in respect of any loss or damage if the loss or damage—

- (a) is attributable to the default of the person who sustained it; or
- (b) is loss or damage in respect of which compensation is payable by virtue of any other enactment.

(3) Any dispute as to a person's entitlement to compensation under this paragraph, or as to the amount of any such compensation, is to be referred to the arbitration of a single arbiter appointed by agreement between the Scottish Ministers and the person who claims to have sustained the loss or damage or, in default of agreement, by the President of the Lands Tribunal for Scotland.

Commercially confidential information

7.—(1) A person who enters any premises in the exercise of a power conferred by these Regulations commits an offense if the person makes use of or discloses any information obtained by the person on those premises with regard to any manufacturing process or trade secret.

- (2) A person who commits an offence under sub-paragraph (1) is liable—
 - (a) on summary conviction, to a fine not exceeding the statutory maximum; or
 - (b) on conviction on indictment, to a fine.

Interpretation

8. For the purposes of paragraphs 5 and 6 a person enters any premises in the exercise of a power conferred by the relevant provisions despite a failure (whether by virtue of the waiver of the requirement by the occupier of the premises or otherwise) to comply with—

(a) any requirement to enter those premises at a reasonable time or after giving notice of intended entry; or

(b) the requirement imposed by paragraph 3.

SCHEDULE 9

Regulation 35

RECOVERY OF CERTAIN EXPENSES

Maximum charges

1.—(1) Subject to sub-paragraph (2), an enforcing authority may charge a person for expenses reasonably incurred by it under these Regulations in relation to a supply of water, as follows:—

- (a) for collecting water samples;
- (b) for the analysis of water samples;
- (c) for carrying out a risk assessment; and
- (d) for reviewing a risk assessment.

(2) An enforcing authority may not charge for the collection and analysis of a water sample which was undertaken to confirm or clarify the results of an analysis of a previous water sample.

(3) If, in relation to the supply of water, more than one person may be charged, the enforcing authority must, in determining who is to be charged and any apportionment of that charge, have regard to the terms (if any) on which the water is supplied and the purposes for which it is used.

Recovery of sums charged

2. The enforcing authority may recover as a civil debt any sum charged by the enforcing authority in accordance with paragraph 1.

SCHEDULE 10

Regulation 45

CHANGES TO OTHER ENACTMENTS

Amendment of the Water (Scotland) Act 1980

1.—(1) The Water (Scotland) Act 1980(23) is amended in accordance with sub-paragraphs (2) to (6).

(2) Omit section 76FA (domestic distribution failures where water is supplied to the public by private supply).

(3) In section 76FB (remedial powers of local authorities where domestic distribution failure affects supply to public)—

- (a) in subsection (1), omit paragraph (a);
- (b) in subsection (2), omit "the relevant water quality issue or, as the case may be,";
- (c) in subsection (3)(a), omit "the relevant water quality issue or, as the case may be,";
- (d) in subsection (4), omit "a relevant water quality issue or" in both places where it occurs;
- (e) in subsection (8), omit "a relevant water quality issue or"; and

^{(23) 1980} c.45; sections 76FA, 76FB and subsection (1A) of section 76G were inserted by S.S.I. 2010/95 and amended by S.S.I. 2014/364, section 76HA was inserted by S.S.I. 2006/297 and amended by S.S.I. 2010/95, and section 76L was inserted by section 168 and schedule 22 of the Water Act 1989 (c.15).

- (f) in subsection (9)—
 - (i) at the end of paragraph (a), insert "or";
 - (ii) at the end of paragraph (b), for ";" substitute "."; and
 - (iii) omit paragraphs (c) and (d).

(4) In section 76G (remedial powers of local authorities in relation to private supplies), omit subsection (1A).

- (5) In section 76HA (application of sections 76G and 76H to certain private supplies)—
 - (a) in subsection (1), for "private water supply to which the Private Water Supplies (Scotland) Regulations 2006 (S.S.I. 2006/209)" substitute "supply of water to which the Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017"; and
 - (b) in subsection (2)—
 - (i) for paragraph (a) substitute—
 - "(a) in subsection (1), for "water for domestic or food production purposes" substitute "water intended for human consumption (within the meaning of the Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017)";";
 - (ii) omit paragraphs (ba) to (d) and (f); and
 - (iii) in paragraph (e), in the text to be substituted—
 - (aa) for "the relevant person" substitute "a "relevant person"; and
 - (bb) for the words from "of water" to the end, substitute "which is a supply of water to which the Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017 apply, has the same meaning as it has in those Regulations.".
- (6) In section 76L (interpretation etc. of Part VIA)—
 - (a) for the definition of "domestic distribution system" substitute—

""domestic distribution system" has the same meaning as it has in the Public Water Supplies (Scotland) Regulations 2014;"; and

(b) omit the definition of "relevant water quality issue".

Amendment of the Private Water Supplies (Scotland) Regulations 2006

- 2. In the Private Water Supplies (Scotland) Regulations 2006(24)—
 - (a) after regulation 3(2) insert—

"(3) These regulations do not apply to a Type A supply.";

- (b) in regulation 7(4), for "(2)" substitute "(3)";
- (c) in regulation 29(3), for "7(5)" substitute "7(4)";
- (d) omit—
 - (i) regulation 6;
 - (ii) regulation 7(1)(a), (2), (4)(b) and (5);
 - (iii) regulations 8 to 26;
 - (iv) in regulation 31(2)(a), "or (5)";
 - (v) regulation 32(b);

⁽²⁴⁾ S.S.I. 2006/209, as amended by S.S.I. 2010/95, S.S.I. 2014/364, S.S.I. 2015/346 and S.S.I. 2017/282.

(vi) regulation 33(1)(a);

- (vii) in regulation 33(2), "25 or";
- (viii) in regulation 33(3), "22(6)(a) or";
- (ix) regulation 34(1)(a)(i) and (ii), (g) and (l);
- (x) regulation 36;
- (xi) in schedule 2, Table A and Table B;
- (xii) schedule 2A;
- (xiii) schedule 3;
- (xiv) in schedule 4, in paragraph (1), "16 and"; and
- (xv) schedule 5A.

Amendment of the Private Water Supplies (Grants) (Scotland) Regulations 2006

- 3. In the Private Water Supplies (Grants) (Scotland) Regulations 2006(25)—
 - (a) in regulation 2(1)—
 - (i) after the definition of "the 2006 Regulations" insert-

""the 2017 Regulations" means the Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017;"; and

(ii) after the definition of "estimated expenditure" insert-

""private water supply" has the same meaning as it has in subsection (2) of section 47 (power to provide funds for private water supplies) of the Local Government in Scotland Act 2003(**26**);";

- (b) in regulation 3(1), after "(2)" insert "or (3)";
- (c) after regulation 3(2) insert—

"(3) Subject to regulation 10(a) and (b), an eligible person is a person who is a "relevant person" within the meaning of the 2017 Regulations in relation to a private water supply—

- (a) in a case where-
 - (i) water introduced into, and supplied through and from, the private water supply system which is used, or intended to be used, to provide the supply of water has been risk assessed in accordance with Part 3 of the 2017 Regulations; and
 - (ii) the risk assessment (as updated, where applicable) establishes that the water---
 - (aa) poses a potential danger to human health;
 - (bb) has failed to meet one or more of the water quality standards and the failure is likely to recur; or
 - (cc) is failing to meet one or more of the water quality standards and the failure is likely to continue or to recur or both; or
- (b) in a case where the private water supply is both—
 - (i) a "supply of water in pipes" within the meaning of the 2017 Regulations; and

⁽²⁵⁾ S.S.I. 2006/210, as amended by S.S.I. 2014/364.

^{(26) 2003} asp 1.

- (ii) the subject of one or more of the following:-
 - (aa) a derogation granted under schedule 5 of the 2017 Regulations;
 - (bb) a remediation notice, an enforcement notice or an emergency notice served under the 2017 Regulations; or
 - (cc) a notice served under section 76G of the 1980 Act."; and
- (d) in regulation 4(3), after "3(2)(b)" insert "or, as the case may be, 3(3)";
- (e) in regulation 5, after "2006 Regulations" insert "or, as the case may be, the 2017 Regulations"; and
- (f) in regulation 9(4)(a), after "Part VI or Part VIII of the 2006 Regulations" insert "or, in a case where the application is made by or on behalf of a person who is an eligible person by virtue of regulation 3(3)(a), information showing that the risk assessment referred to in regulation 3(3)(a) has been carried out and a summary of the results of the risk assessment (as updated, where applicable)".

Revocations

- 4. The following provisions are revoked:—
 - (a) regulations 3, 4 and 16 to 19 and paragraph (a) of regulation 5 of the Water Quality (Scotland) Regulations 2010(27);
 - (b) paragraphs (b) and (c) of regulation 48 of the Public Water Supplies (Scotland) Regulations 2014(**28**); and
 - (c) regulations 5 to 7 and 9 to 12 of the Private and Public Water Supplies (Miscellaneous Amendments) (Scotland) Regulations 2015(**29**).

⁽²⁷⁾ S.S.I. 2010/95.

⁽²⁸⁾ S.S.I. 2014/364, as amended by S.S.I. 2015/100, S.S.I. 2015/346 and S.S.I. 2017/281.

⁽**29**) S.S.I. 2015/346.