

SCHEDULE 1

regulations 2 and 4

PRESCRIBED CONCENTRATIONS AND VALUES

TABLE A
MICROBIOLOGICAL PARAMETERS

Part I:*Directive requirements*

<i>Item</i>	<i>Parameters</i>	<i>Concentration or Value (maximum)</i>	<i>Units of Measurement</i>	<i>Point of compliance</i>
1.	Enterococci	0	number/100ml	Consumers' taps
2.	<i>Escherichia coli</i> (<i>E. coli</i>)	0	number/100ml	Consumers' taps

Part II:*National requirements*

<i>Item</i>	<i>Parameters</i>	<i>Concentration or Value (maximum)</i>	<i>Units of Measurement</i>	<i>Point of compliance</i>
1.	Coliform bacteria	0	number/100ml	Service reservoirs* and water treatment works
2.	<i>Escherichia coli</i> (<i>E. coli</i>)	0	number/100ml	Service reservoirs and water treatment works

Note:

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

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TABLE B CHEMICAL PARAMETERS

Part I:

Directive requirements

<i>Item</i>	<i>Parameters</i>	<i>Concentration or Value (maximum)</i>	<i>Units of Measurement</i>	<i>Point of compliance</i>
1.	Acrylamide	0.10	µg/l	⁽ⁱ⁾
2.	Antimony	5.0	µgSb/l	Consumers' taps
3.	Arsenic	10	µgAs/l	Consumers' taps
4.	Benzene	1.0	µg/l	Consumers' taps
5.	Benzo(a)pyrene	0.010	µg/l	Consumers' taps
6.	Boron	1.0	mgB/l	Consumers' taps
7.	Bromate	10	µgBrO ₃ /l	Consumers' taps
8.	Cadmium	5.0	µgCd/l	Consumers' taps
9.	Chromium	50	µgCr/l	Consumers' taps
10.	Copper ⁽ⁱⁱ⁾	2.0	mgCu/l	Consumers' taps
11.	Cyanide	50	µgCN/l	Consumers' taps
12.	1, 2 dichloroethane	3.0	µg/l	Consumers' taps
13.	Epichlorohydrin	0.10	µg/l	⁽ⁱ⁾
14.	Fluoride	1.5	mgF/l	Consumers' taps
15.	Lead ⁽ⁱⁱ⁾	(a)	(a)25, µgPb/l from 25th December 2003 until immediately before 25th December 2013	Consumers' taps
		(b)	(b)10, µgPb/l on and after 25th December 2013	Consumers' taps
16.	Mercury	1.0	µgHg/l	Consumers' taps

<i>Item</i>	<i>Parameters</i>	<i>Concentration or Value (maximum)</i>	<i>Units of Measurement</i>	<i>Point of compliance</i>
17.	Nickel ⁽ⁱⁱ⁾	20	µgNi/l	Consumers' taps
18.	Nitrate ⁽ⁱⁱⁱ⁾	50	mgNO ₃ /l	Consumers' taps
19.	Nitrite ⁽ⁱⁱⁱ⁾	0.50	mgNO ₂ /l	Consumers' taps
		0.10		Treatment Works
20.	Pesticides ^{(iv)(v)}	0.030	µg/l	Consumers' taps
	Aldrin)			
	Dieldrin)			
	Heptachlor)			
	Heptachlor)			
	epoxide)			
	other pesticides	0.10	µg/l	Consumers' taps
21.	Pesticides: Total ^(vi)	0.50	µg/l	Consumers' taps
22.	Polycyclic aromatic hydrocarbons ^(vii)	0.10	µg/l	Consumers' taps
23.	Selenium	10	µgSe/l	Consumers' taps
24.	Tetrachloroethene and Trichloroethene ^(viii)	10	µg/l	Consumers' taps
25.	Trihalomethanes: Total ^(ix)	100	µg/l	Consumers' taps
26.	Vinyl chloride	0.50	µg/l	⁽ⁱ⁾

Notes:

- (i) 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.
- (ii) See also regulation 6(6).
- (iii) See also regulation 4(2)(d).
- (iv) See the definition of “pesticides and related products” in regulation 2.
- (v) The parametric value applies to each individual pesticide.
- (vi) “Pesticides: Total” means the sum of the concentrations of the individual pesticides detected and quantified in the monitoring procedure.
- (vii) The specified compounds are:

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- benzo(b)fluoranthene
- 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.

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

(ix) 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

<i>Item</i>	<i>Parameters</i>	<i>Concentration or Value (maximum unless otherwise stated)</i>	<i>Units of Measurement</i>	<i>Point of compliance</i>
1.	Aluminium	200	µgAl/l	Consumers' taps
2.	Colour	20	mg/l Pt/Co	Consumers' taps
3.	Hydrogen ion	10.0	pH value	Consumers' taps
		6.5 (minimum)	pH value	Consumers' taps
4.	Iron	200	µgFe/l	Consumers' taps
5.	Manganese	50	µgMn/l	Consumers' taps
6.	Odour	3 at 25°C	Dilution number	Consumers' taps
7.	Sodium	200	mgNa/l	Consumers' taps
8.	Taste	3 at 25°C	Dilution number	Consumers' taps
9.	Tetrachlorome- thane	3	µg/l	Consumers' taps
10.	Turbidity	4	NTU	Consumers' taps

SCHEDULE 2

regulations 2 and 4

INDICATOR PARAMETERS

<i>Item</i>	<i>Parameters</i>	<i>Specification Concentration or Value (maximum) or State</i>	<i>Units of Measurement</i>	<i>Point of monitoring</i>
1.	Ammonium	0.50	mgNH ₄ /l	Consumers' taps
2.	Chloride ⁽ⁱ⁾	250	mgCl/l	Supply point*
3.	Clostridium perfringens (including spores)	0	Number/100ml	Supply point*
4.	Coliform bacteria	0	Number/100ml	Consumers' taps
5.	Colony counts	No abnormal change	Number/1ml at 22°C Number/1ml at 37°C	Consumers' taps, service Reservoirs and treatment works
6.	Conductivity ⁽ⁱ⁾	2500	µS/cm at 20°C	Supply point*
7.	Hydrogen ion	9.5	pHvalue	Consumers' taps
8.	Sulphate ⁽ⁱ⁾	250	mgSO ₄ /l	Supply point*
9.	Total indicative dose (for radioactivity) ⁽ⁱⁱ⁾	0.10	mSv/year	Supply point*
10.	Total organic carbon (TOC)	No abnormal change	mgC/l	Supply point*
11.	Tritium (for radioactivity)	100	Bq/l	Supply point*
12.	Turbidity	1	NTU	Treatment works

*Notes:***(i)** The water should not be aggressive.**(ii)** Excluding tritium, potassium-40, radon and radon decay products.

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

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SCHEDULE 3

Part IV

MONITORING

TABLE 1

PARAMETERS AND CIRCUMSTANCES FOR CHECK MONITORING

(1) <i>Item</i>	(2) <i>Parameter</i>	(3) <i>Circumstances</i>
1.	Aluminium	When used as flocculant or where the water originates from, or is influenced by, surface waters
2.	Ammonium	
3.	<i>Clostridium perfringens</i> (including spores)	Where the water originates from, or is influenced by, surface waters
4.	Coliform bacteria	
5.	Colony counts	
6.	Colour	
7.	Conductivity	
8.	<i>Escherichia coli</i> (<i>E. coli</i>)	
9.	Hydrogen ion	
10.	Iron	When used as flocculant or where the water originates from, or is influenced by, surface waters
11.	Manganese	Where the water originates from, or is influenced by, surface waters
12.	Nitrate	When chloramination is practised
13.	Nitrite	When chloramination is practised
14.	Odour	
15.	Taste	
16.	Turbidity	

TABLE 2
ANNUAL SAMPLING FREQUENCIES: WATER SUPPLY ZONES

(1) <i>Substances and parameters subject to check monitoring</i>	(2) <i>Estimated population of water supply zone</i>	(3) <i>Reduced</i>	(4) <i>Standard</i>
E. coli			
Coliform bacteria	<100		4
Residual disinfectant	≥100		12 per 5,000 population ^(f)
Aluminium			
Ammonium			
<i>Clostridium perfringens (including spores)*</i>	<100	1	2
	100—4,999	2	4
	5,000—9,999	6	12
Colony counts	10,000—29,999	12	24
Colour	30,000—49,999	18	36
Conductivity*	50,000—79,999	26	52
Hydrogen ion	80,000—100,000	38	76
Iron			
Manganese			
Nitrate ⁽ⁱⁱ⁾			
Nitrite ⁽ⁱⁱⁱ⁾			
Odour			
Taste			
Turbidity			

Notes:

* Sampling for these parameters may be within water supply zones or at supply points as specified in Table 3, subject to notes (ii) and (iii) below.

(i) Where the population is not an exact multiple of 5,000, the population figure should be rounded up to the nearest multiple of 5,000.

(ii) Check monitoring in water supply zones is required only where chloramination is practised. In other circumstances audit monitoring is required.

(iii) Audit monitoring in water supply zones is required only where sodium hypochlorite is added after water has left the treatment works. In other circumstances, audit monitoring is required at supply points.

(iv) To monitor for total indicative dose (for radioactivity).

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(1) <i>Substances and parameters subject to check monitoring</i>	(2) <i>Estimated population of water supply zone</i>	(3) <i>Reduced</i>	(4) <i>Standard</i>
<i>Parameters subject to audit monitoring</i>			
Aluminium			
Antimony			
Arsenic			
Benzene *	<100		1
Benzo(a)pyrene	100—4,999		4
Boron *	5,000—100,000		8
Bromate ⁽ⁱⁱⁱ⁾			
Cadmium			
Chromium			
Copper			
Cyanide *			
1,2 dichloroethane *			
Enterococci			
Fluoride *			
Iron			
Lead			
Manganese			
Mercury *			
Nickel			
Nitrate ⁽ⁱⁱ⁾			
Nitrite ⁽ⁱⁱ⁾			
Pesticides and related products *			

Notes:

- * Sampling for these parameters may be within water supply zones or at supply points as specified in Table 3, subject to notes (ii) and (iii) below.
- (i) Where the population is not an exact multiple of 5,000, the population figure should be rounded up to the nearest multiple of 5,000.
- (ii) Check monitoring in water supply zones is required only where chloramination is practised. In other circumstances audit monitoring is required.
- (iii) Audit monitoring in water supply zones is required only where sodium hypochlorite is added after water has left the treatment works. In other circumstances, audit monitoring is required at supply points.
- (iv) To monitor for total indicative dose (for radioactivity).

(1) <i>Substances and parameters subject to check monitoring</i>	(2) <i>Estimated population of water supply zone</i>	(3) <i>Reduced</i>	(4) <i>Standard</i>
Polycyclic aromatic hydrocarbons	<100		1
Selenium	100—4,999		4
Sodium	5,000—100,000		8
Trichloroethene			
/Tetrachloroethene*			
Tetrachloromethane*			
Trihalomethanes			
Chloride*			
Sulphate*			
Total organic carbon*			
Tritium*			
Gross alpha ^{*(iv)}			
Gross beta ^{*(iv)}			

Notes:

- * Sampling for these parameters may be within water supply zones or at supply points as specified in Table 3, subject to notes (ii) and (iii) below.
- (i) Where the population is not an exact multiple of 5,000, the population figure should be rounded up to the nearest multiple of 5,000.
- (ii) Check monitoring in water supply zones is required only where chloramination is practised. In other circumstances audit monitoring is required.
- (iii) Audit monitoring in water supply zones is required only where sodium hypochlorite is added after water has left the treatment works. In other circumstances, audit monitoring is required at supply points.
- (iv) To monitor for total indicative dose (for radioactivity).

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TABLE 3
ANNUAL SAMPLING FREQUENCIES:
TREATMENT WORKS OR SUPPLY POINTS*

(1) <i>Item</i>	(2) <i>Substances and parameters</i>	(3) <i>Volume of water supplied m³/d</i>	(4) <i>Reduced</i>	(5) <i>Standard</i>
1.	<i>E. Coli</i>	<20		4
2.	Coliform bacteria	20—1,999	12	52
3.	Colony counts	2,000—5,999	52	104
4.	Nitrite ⁽ⁱⁱⁱ⁾	6,000—11,999	104	208
5.	Residual disinfectant	≥12,000	104	365
6.	Turbidity			
<i>Subject to check monitoring</i>				
7.	<i>Clostridium perfringens</i> ⁽ⁱ⁾	<20		2
		20 — 999	2	4
8.	Conductivity	1,000 — 1,999	6	12
		2,000 — 5,999	12	24
		6,000 — 9,999	18	36
		10,000 — 15,999	26	52
		16,000 — 32,999	52	104
		33,000 — 49,999	78	156
		50,000 — 67,999	104	208
		68,000 — 84,999	130	260
		85,000 — 101,999	156	312
		102,000 — 119,999	183	365

Notes:

* Sampling is at treatment works for the substances and parameters shown in column (1) of the Table as items 1 to 6 and at supply points for the other substances and parameters, except nitrite, subject to notes (ii) and (iii) below.

(i) Check monitoring is required only in respect of surface waters (see regulation 6(2) and Table 1 in Schedule 3).

(ii) Sampling at treatment works when chloramination is practised.

(iii) Sampling at treatment works when chloramination is not practised.

(iv) Audit monitoring at supply points is required only where sodium hypochlorite is not added after water has left the treatment works. In other circumstances, audit monitoring is required in water supply zones.

(v) To monitor for total indicative dose (for radioactivity).

(1) <i>Item</i>	(2) <i>Substances and parameters</i>	(3) <i>Volume of water supplied m³/d</i>	(4) <i>Reduced</i>	(5) <i>Standard</i>
		120,000 — 241,999	365	730
		242,000 — 484,999	730	1,460
		485,000 — 728,999	1,095	2,190
<i>Subject to audit monitoring</i>				
9.	Benzene			
10.	Boron			
11.	Bromate ^(iv)			
12.	Cyanide			
13.	1,2 dichloroethane			
14.	Fluoride			
15.	Mercury	<20		1
16.	Nitrite ⁽ⁱⁱ⁾	20—999		4
17.	Pesticides and Related products	1,000—49,999	8	
		50,000—89,999	12	
		90,000—299,999	24	
		300,000— 649,000	36	
18.	Trichloroethene) Tetrachloroethene)	≥650,000	48	
19.	Tetrachloromethane			
20.	Chloride			
21.	Sulphate			

Notes:

* Sampling is at treatment works for the substances and parameters shown in column (1) of the Table as items 1 to 6 and at supply points for the other substances and parameters, except nitrite, subject to notes (ii) and (iii) below.

(i) Check monitoring is required only in respect of surface waters (see regulation 6(2) and Table 1 in Schedule 3).

(ii) Sampling at treatment works when chloramination is practised.

(ii) Sampling at treatment works when chloramination is not practised.

(iv) Audit monitoring at supply points is required only where sodium hypochlorite is not added after water has left the treatment works. In other circumstances, audit monitoring is required in water supply zones.

(v) To monitor for total indicative dose (for radioactivity).

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(1) <i>Item</i>	(2) <i>Substances and parameters</i>	(3) <i>Volume of water supplied m³/d</i>	(4) <i>Reduced</i>	(5) <i>Standard</i>
22.	Total organic carbon			
23.	Tritium			
24.	Gross alpha ^(v)			
25.	Gross beta ^(v)			

Notes:

- * Sampling is at treatment works for the substances and parameters shown in column (1) of the Table as items 1 to 6 and at supply points for the other substances and parameters, except nitrite, subject to notes (ii) and (iii) below.
- (i) Check monitoring is required only in respect of surface waters (see regulation 6(2) and Table 1 in Schedule 3).
- (ii) Sampling at treatment works when chloramination is practised.
- (ii) Sampling at treatment works when chloramination is not practised.
- (iv) Audit monitoring at supply points is required only where sodium hypochlorite is not added after water has left the treatment works. In other circumstances, audit monitoring is required in water supply zones.
- (v) To monitor for total indicative dose (for radioactivity).

SCHEDULE 4

regulation 16

ANALYTICAL METHODOLOGY

TABLE A1
PARAMETERS FOR WHICH, SUBJECT TO REGULATION 16(7), METHODS OF ANALYSIS ARE PRESCRIBED

(1) <i>Parameter</i>	(2) <i>Method</i>
<i>Clostridium perfringens</i> (including spores)	Membrane filtration followed by anaerobic incubation of the membrane on m-CP agar* at 44 ± 1°C for 21 ± 3 hours. Count opaque yellow colonies that turn pink or red after exposure to ammonium hydroxide vapours for 20 to 30 seconds.
Coliform bacteria	ISO 9308-1
Colony count 22°C — enumeration of culturable microorganisms	prEN ISO 6222
Colony count 37°C — enumeration of culturable microorganisms	prEN ISO 6222
Enterococci	ISO 7899-2
<i>Escherichia coli</i> (<i>E. coli</i>)	ISO 9308-1

*The composition of m-CP agar is:

Basal medium	
Tryptose	30.0g
Yeast extract	20.0g
Sucrose	5.0g
L-cysteine hydrochloride	1.0g
MgSO ₄ ·7H ₂ O	0.1g
Bromocresol purple	40.0mg
Agar	15.0g
Water	1,000.0ml

Dissolve the ingredients of the basal medium, adjust pH to 7.6 and autoclave at 121°C for 15 minutes. Allow the medium to cool and add:

D-cycloserine	400.0mg
Polymyxine-B sulphate	25.0mg
Indoxyl-[beta]-D-glucoside	60.0mg
to be dissolved in 8ml sterile water before addition	
Filter — sterilised 0.5% phenolphthalein diphosphate solution	20.0ml
Filter — sterilised 4.5% FeCl ₃ · 6H ₂ O	2.0ml

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TABLE A2
PARAMETERS IN RELATION TO WHICH METHODS OF
ANALYSIS MUST SATISFY PRESCRIBED CHARACTERISTICS

(1) <i>Parameters</i>	(2) <i>Trueness % of prescribed concentration or value or specification</i>	(3) <i>Precision % of prescribed concentration or value or specification</i>	(4) <i>Limit of detection % of prescribed concentration or value or specification</i>
Aluminium	10	10	10
Ammonium	10	10	10
Antimony	25	25	25
Arsenic	10	10	10
Benzene	25	25	25
Benzo(a)pyrene	25	25	25
Boron	10	10	10
Bromate	25	25	25
Cadmium	10	10	10
Chloride	10	10	10
Chromium	10	10	10
Colour	10	10	10
Conductivity	10	10	10
Copper	10	10	10
Cyanide ⁽ⁱ⁾	10	10	10
1,2-dichloroethane	25	25	10
Fluoride	10	10	10
Iron	10	10	10
Lead	10	10	10
Manganese	10	10	10
Mercury	20	10	20

Notes:

- (i) The method of analysis should determine total cyanide in all forms.
- (ii) The performance characteristics apply to each individual pesticide and will depend on the pesticide concerned.
- (iii) The performance characteristics apply to the individual substances specified at 25% of the parametric value in Part I of Table B in Schedule 1.
- (iv) The performance characteristics apply to the individual substances specified at 50% of the parametric value in Part I of Table B in Schedule 1.
- (v) The performance characteristics apply to the prescribed value of 4NTU.
- (vi) The performance characteristics apply to the specification of INTU for water leaving treatment works.

(1) <i>Parameters</i>	(2) <i>Trueness % of prescribed concentration or value or specification</i>	(3) <i>Precision % of prescribed concentration or value or specification</i>	(4) <i>Limit of detection % of prescribed concentration or value or specification</i>
Nickel	10	10	10
Nitrate	10	10	10
Nitrite	10	10	10
Pesticides and related products ⁽ⁱⁱ⁾	25	25	25
Polycyclic aromatic hydrocarbons ⁽ⁱⁱⁱ⁾	25	25	25
Selenium	10	10	10
Sodium	10	10	10
Sulphate	10	10	10
Tetrachloromethane	20	20	20
Trichloroethene ^(iv)	25	25	10
Trihalomethanes: Total ⁽ⁱⁱⁱ⁾	25	25	10
Turbidity ^(v)	10	10	10
Turbidity ^(vi)	25	25	25

Notes:

- (i) The method of analysis should determine total cyanide in all forms.
- (ii) The performance characteristics apply to each individual pesticide and will depend on the pesticide concerned.
- (iii) The performance characteristics apply to the individual substances specified at 25% of the parametric value in Part I of Table B in Schedule 1.
- (iv) The performance characteristics apply to the individual substances specified at 50% of the parametric value in Part I of Table B in Schedule 1.
- (v) The performance characteristics apply to the prescribed value of 4NTU.
- (vi) The performance characteristics apply to the specification of 1NTU for water leaving treatment works.

SCHEDULE 5

regulation 40

AMENDMENT OF THE WATER SUPPLY (WATER QUALITY) REGULATIONS 1989

The amendments to the 1989 Regulations referred to in regulation 40 are—

- (a) after regulation 13, the insertion of the following regulation—

“Frequency of sampling for particular organisms and substances

13A.—(1) Subject to paragraphs (5) and (6), in each of the years 2002 and 2003, a water undertaker shall take, or cause to be taken, from its sampling points or, as the case may be, its supply points, for analysis for testing against the concentrations and values

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specified in column (2) of Table 4A for the organisms and substances listed in column (1) of that Table, not less than the number of samples specified in paragraphs (2) and (3).

(2) In respect of supply points and the supply of a volume of water within a range shown in column (3) of that Table, the number is that shown in column (4) of that Table with the prefix “S” as applicable to a volume within that range.

(3) In respect of sampling points and the supply of water to an estimated population within a range shown in column (5) of that Table, the number is that shown in column (6) of that Table with the prefix “S” as applicable to a population within that range.

(4) In each of those years samples shall be taken at regular intervals throughout the year.

(5) Where—

(a) a programme of work has been approved or is treated as approved under regulation 41 (transitional provision: programmes of work) of the Water Supply (Water Quality) Regulations 2001; or has otherwise been agreed by the National Assembly for Wales; and

(b) at least one of the steps required to be taken in accordance with that programme—

(i) relates to an organism or substance listed in column (1) of Table 4A; and

(ii) remains to be completed,

the number of samples to be taken in any period of twelve months beginning with the date on which the programme was approved, treated as approved, or agreed (as the case may be) and ending on the day on which the last of those steps is completed, for analysis for testing for that organism or substance, may be the number shown in column (4) or, as the case may be, column (6) of that Table with the prefix “R”.

(6) Where analysis of the samples taken by a water undertaker in 2002 in accordance with this regulation has established a concentration or value in respect of an organism or substance listed in column (1) of Table 4A that is significantly lower than the prescribed concentration or value, the number of samples to be taken in 2003, for analysis for testing for that organism or substance, may be the number shown in column (4) or, as the case may be, column (6) of that Table with the prefix “R”.

(b) after regulation 20, the insertion of the following regulation—

“Additional testing for particular parameters

20A. The samples taken in accordance with regulation 13 shall additionally be tested against the concentrations and values specified in column (2) of Table 4B.”;

(c) in regulation 21 (collection and analysis of samples)—

(i) in paragraph (2), the insertion, after “means”, of “subject to paragraph (3)”; and

(ii) the addition, at the end, of the following—

“(3) In relation to each of the parameters and other substances listed in column (1) of Table 4B, paragraph (2)(d) shall have effect as if for sub-paragraph (iii) there were substituted the requirements of regulation 21A.”

(d) after regulation 21, the insertion of the following regulation—

“Method of analysis of samples for particular parameters, and substances

21A.—(1) The method of analysis used for testing for a parameter or other substance listed in column (1) of Table 4B against the concentrations in column (2) of that Table must be capable, at the time of use—

- (a) of measuring concentrations with the trueness and precision specified in relation to that parameter or substance in columns (3) and (4) of Table 4B; and
 - (b) of detecting the parameter or substance at the limit of detection specified in relation to it in column (5) of that Table.
- (2) For the purposes of paragraph (1)—
- “limit of detection” is to be calculated as—
- (a) three times the relative within batch standard deviation of a natural sample containing a low concentration of the parameter or substance; or
 - (b) five times the relative within batch standard deviation of a blank sample;
- “precision” (the random error) is the standard deviation (within a batch and between batches) of the spread of results about the mean; and
- “trueness” (the systematic error) is the difference between the mean value of a large number of repeated measurements and the true value.”;
- (e) in regulation 29, in paragraph (1)(f)—
- (i) after the words “Part IV of these Regulations”, the insertion of “, other than regulation 13A,”; and
 - (ii) by the insertion, at the end, of “or regulation 29 of the Water Supply (Water Quality) Regulations 2001”; and
- (f) the insertion, after Table 4 in Schedule 3, of the following Tables—

“TABLE 4A**SAMPLING FOR PARTICULAR ORGANISMS AND SUBSTANCES**

<i>(1)</i> <i>Organism</i> <i>or</i> <i>substance</i>	<i>(2)</i> <i>Concentration</i> <i>or value</i> <i>and unit of</i> <i>measurement</i>	<i>(3)</i> <i>Volume</i> <i>of water</i> <i>supplied</i> <i>m³/d</i>	<i>(4)</i> <i>Annual</i> <i>sampling</i> <i>frequency</i>	<i>(5)</i> <i>Estimated</i> <i>population</i> <i>of water</i> <i>supply zone</i>	<i>(6)</i> <i>Annual</i> <i>sampling</i> <i>frequency</i>
Benzene	1.0µg/l				
Bromate	1.0µgBrO ₃ /l				
		≤999	S2 or R1	≤4,999	S2 or R1
<i>Clostridium</i> <i>perfringens</i> (Including spores)	0	1,000— 49,999	S4 or R1	5,000— 50,000	S4 or R1
		≤50,000			

* where the water originates from, or is influenced by, surface waters

Status: This is the original version (as it was originally made).

(1) Organism or substance	(2) Concentration or value and unit of measurement	(3) Volume of water supplied m ³ /d	(4) Annual sampling frequency	(5) Estimated population of water supply zone	(6) Annual sampling frequency
	Number/ 100ml		S8 or R2		
1,2 dichloroethane	3.0 µg/l				
Enterococci	0 Number/100ml				
Nitrite	0.10 mgNO ₂ / l				

* where the water originates from, or is influenced by, surface waters

TABLE 4B
PARAMETERS AND SUBSTANCES IN RELATION TO
WHICH, SUBJECT TO REGULATION 21A, METHODS OF
ANALYSIS MUST SATISFY PRESCRIBED CHARACTERISTICS

(1) Parameter or other substance	(2) Concentration and unit of measurement	(3) Trueness % of concentration	(4) Precision % of concentration	(5) Limit of detection % of concentration
Antimony	5.0 µgSb/l	25	25	25
Arsenic	10 µgAs/l	10	10	10
Benzene	1.0 µg/l	25	25	25
Boron	1.0 mgB/l	10	10	10
Bromate	10 µBrO ₃ /l	25	25	25
Copper	2.0 mgCu/l	10	10	10
1,2 dichloroethane	3.0 µg/l	25	25	10
Lead	25 µgPb/l	10	10	10
Nickel	20 µgNi/l	10	10	10
Nitrite (ex works)	0.1 gNO ₂ /l	10	10	10
Tetrachloroethene	10 µg/l	25	25	10 ^{**}

* Trueness, precision and limit of detection apply to the individual substances specified at 50% of the concentration in column (2).

(1) Parameter or other substance	(2) Concentration and unit of measurement	(3) Trueness % of concentration	(4) Precision % of concentration	(5) Limit of detection % of concentration
Trichloroethene [*])				
* Trueness, precision and limit of detection apply to the individual substances specified at 50% of the concentration in column (2).				

SCHEDULE 6

regulation 41

PROGRAMMES OF WORK

A water undertaker's programme of work shall—

- (a) identify, by reference to the parameters set out in the Table below, those parameters in respect of which the requirements of regulation 41(1)(a) and (b) are unlikely to be satisfied unless steps are taken to secure that those requirements will be met;
- (b) identify whether the requirement that the formula $[\text{nitrate}]/50 + [\text{nitrite}]/3 \leq 1$, where the square brackets signify the concentrations in mg/l for nitrate (NO₃) and nitrite (NO₂), is unlikely to be satisfied;
- (c) specify the steps that the water undertaker intends to take for the purpose of securing that the requirements of regulation 41(1)(a) and (b) are met;
- (d) specify the date by which each of the steps specified in accordance with paragraph (c) is proposed to be completed; and
- (e) specify the times at which, or the periods within which, reports will be made to the National Assembly for Wales in relation to the taking and completion of the steps specified in accordance with paragraph (c).

TABLE

Enterococci
Acrylamide
Antimony
Arsenic
Benzene
Benzo(a)pyrene
Boron
Bromate
Copper
1,2-dichloroethane
Epichlorohydrin
Lead
Nickel

Status: This is the original version (as it was originally made).

Nitrite

Polycyclic aromatic hydrocarbons

Tetrachloroethene) sum of concentrations

Trichloroethene)

Trihalomethanes — Total (sum of concentrations of chloroform, bromoform, dibromochloromethane and bromodichloromethane)

Vinyl chloride