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SCOTTISH STATUTORY INSTRUMENTS

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**2001 No. 207**

**WATER SUPPLY**

**The Water Supply (Water Quality) (Scotland) Regulations 2001**

*Made - - - - 4th June 2001*  
*Laid before the Scottish*  
*Parliament - - - - 5th June 2001*  
*Coming into force in accordance with regulation 1(2)*  
*to (4)*

The Scottish Ministers, in exercise of the powers conferred by sections 76B, 76F(5) and (6), 76J, 101(1) and (1A), and 109(1) of the Water (Scotland) Act 1980<sup>M1</sup> and section 2(2) of the European Communities Act 1972<sup>M2</sup>, and of all other powers enabling them in that behalf, hereby make the following Regulations:

**Marginal Citations**

- M1** 1980 c.45. Sections 76B, 76F and 76J were inserted by the [Water Act 1989 \(c.15\)](#), [Schedule 22](#). Section 101(1A) was inserted by the [Natural Heritage \(Scotland\) Act 1991 \(c.28\)](#), [Schedule 10](#), [paragraph 9\(5\)](#). The functions of the Secretary of State were transferred to the Scottish Ministers by virtue of section 53 of the [Scotland Act 1998 \(c.46\)](#).
- M2** 1972 c.68. Section 2(2) was amended by the [Scotland Act 1998 \(c.46\)](#), [Schedule 8](#), [paragraph 15\(3\)](#). The functions conferred on the Minister of the Crown under section 2(2) of the European Communities Act 1972, insofar as within devolved competence, were transferred to the Scottish Ministers by virtue of section 53 of the Scotland Act 1998.

**PART I**  
**GENERAL**

**Citation, commencement and extent**

1.—(1) These Regulations may be cited as the Water Supply (Water Quality) (Scotland) Regulations 2001.

(2) This regulation and regulations 2, 36 and 37 shall come into force on 26th June 2001.

(3) Regulations 3 and 38 shall come into force on 1st June 2003.

(4) All other provisions of these Regulations shall come into force on 25th December 2003.

(5) These Regulations extend to Scotland only.

## Interpretation

2.—(1) In these Regulations—

“the Act” means the Water (Scotland) Act 1980;

“the 1990 Regulations” means the Water Supply (Water Quality) (Scotland) Regulations 1990<sup>M3</sup>;

“appropriate local authority” and “appropriate health board” in relation to a departure authorised under regulation 20 or 21 or an application for any such authorisation, means the local authority and the health board, respectively, whose area contains any part of the water supply zone to which the authorisation relates or, in the case of an application, would apply if a departure were authorised in the terms sought;

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

“consumer” means a person to whom water is supplied for regulation 4(1) purposes by a water authority in the discharge of its duties under Part II of the Act;

“disinfection” means a process which removes or renders inactive pathogenic micro-organisms so as to satisfy the requirements of Part III of these Regulations in respect of micro-organisms (other than parameters), parasites and the parameters listed in Table A in Schedule 1 to these Regulations; and “disinfected” shall be construed accordingly;

“ground waters” has the same meaning as in section 30A(1)(d) of the Control of Pollution Act 1974<sup>M4</sup>, but does not include waters contained in underground strata in a sewer, pipe or service reservoir within the meaning of regulation 2(4);

“health board” means a board constituted by order made under section 2(1) of the National Health Service (Scotland) Act 1978<sup>M5</sup>;

“indicator parameter” means a parameter listed in Schedule 2;

“local authority” means a council constituted under section 2 of the Local Government etc. (Scotland) Act 1994<sup>M6</sup>;

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

“pesticides and related products” means—

- (a) any organic insecticide;
- (b) any organic herbicide;
- (c) any organic fungicide;
- (d) any organic nematocide;
- (e) any organic acaricide;
- (f) any organic algicide;
- (g) any organic rodenticide;
- (h) any organic slimicide; and
- (i) any product related to any of (a) to (h) (including any growth regulator), and includes their relevant metabolites, degradation and reaction products;

“prescribed concentration or value”, in relation to any parameter, means the maximum or minimum concentration or value specified in relation to that parameter in Table A or Table B in Schedule 1 as measured by reference to the unit of measurement so specified, and as read, where appropriate, with the notes to those Tables;

“regulation 4(1) purposes”, in relation to the supply of water, means a supply—

- (a) for such domestic purposes as consist in or include, cooking, drinking, food preparation or washing; or
- (b) for any of these domestic purposes to premises in which food is produced;

“sampling point”—

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

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

“state”, in relation to an indicator parameter, means the state specified in relation to that parameter in Schedule 2 as measured by reference to the unit of measurement so specified;

“supply point” means a blending point, service reservoir, treatment works or other point, not being a sampling point, which the Scottish Ministers may, in accordance with regulation 8, authorise for the purposes of regulation 6;

“water authority” means a new water and sewerage authority constituted under section 62 of the Local Government etc. (Scotland) Act 1994;

“water supply zone”, in relation to a water authority and a year, means an area designated for that year by the water authority in accordance with regulation 3; and

“year” means a calendar year.

(2) Other expressions used both in these Regulations and in Council Directive [98/83/EC](#) (on the quality of water intended for human consumption) <sup>M7</sup> have the same meaning in these Regulations as they have in that Directive.

(3) Any reference in these Regulations to a numbered regulation shall be treated as the regulation bearing that number in these Regulations; any reference to a numbered paragraph shall be treated as the paragraph bearing that number in the regulation in which it appears; and any reference to a Schedule shall be treated as a reference to a Schedule to these Regulations;

(4) Subject to paragraph (5), references in these Regulations to a service reservoir are references to any structure, other than a structure at a treatment works, in which water that has been treated with a view to complying with the requirements of regulation 4 is contained and stored for the purpose of meeting a variable demand for the supply of water.

(5) Where references in these Regulations to a service reservoir would, but for this paragraph, include references to a structure comprising more than one compartment—

- (a) each compartment which has its own water inlet and water outlet and is not connected hydraulically to any other compartment shall be treated as a single service reservoir;
- (b) the compartments which are connected hydraulically shall be treated as a single service reservoir; and
- (c) unless all of the compartments are connected hydraulically, the structure as a whole shall not be treated as a service reservoir.

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**Changes to legislation:** There are outstanding changes not yet made by the legislation.gov.uk editorial team to The Water Supply (Water Quality) (Scotland) Regulations 2001. Any changes that have already been made by the team appear in the content and are referenced with annotations. (See end of Document for details) [View outstanding changes](#)

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#### Marginal Citations

- M3** S.I. 1990/119, amended by S.I. 1991/1333.  
**M4** 1974 c.40.  
**M5** 1978 c.29.  
**M6** 1994 c.39.  
**M7** O.J. No. L 330, 5.12.98, p.32.

## PART II

### WATER SUPPLY ZONES

#### Water supply zones

3.—(1) Before the beginning of each year in which it intends to supply water for regulation 4(1) purposes, a water authority shall designate the names and areas within its area of supply that are to be its water supply zones for that year.

(2) A water supply zone may not comprise an area whose population immediately before the beginning of the year in question is estimated by the water authority to exceed 100,000.

(3) A water authority may not vary a designation under paragraph (1) after the beginning of the year in relation to which the designation has effect.

## PART III

### WHOLESOMENESS

#### Wholesomeness

4.—(1) Water supplied—

- (a) for such domestic purposes as consist in or include, cooking, drinking, food preparation or washing; or
- (b) for any of those domestic purposes to premises in which food is produced,

shall, subject to paragraphs (4) and (5) below, be regarded as wholesome for the purposes of Part VI A of the Act, as it applies to the supply of water for those domestic purposes, if the requirements of paragraph (2) are satisfied.

(2) The requirements of this paragraph are—

- (a) that the water does not contain—
  - (i) any micro-organism (other than a parameter) or parasite; or
  - (ii) any substance (other than a parameter),

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

- (b) that the water does not contain any substance (whether or not a parameter) at a concentration or value which, in conjunction with any other substance it contains (whether or not a parameter) would constitute a potential danger to human health;

- (c) that the water does not contain concentrations or values of the parameters listed in Tables A and B in Schedule 1 in excess of or, as the case may be, less than the prescribed concentrations or values; and

- (d) that the water satisfies the formula  $[\text{nitrate}]/50 + [\text{nitrite}]/3 \leq 1$ , where the square brackets signify the concentrations in mg/l for nitrate (NO<sub>3</sub>) and nitrite (NO<sub>2</sub>).
- (3) The point at which the requirements of paragraph (2), in so far as they relate to the parameters set out in Part I of Table A and in Table B in Schedule 1 are to be complied with is—
- (a) in the case of water supplied from a tanker, the point at which the water emerges from the tanker;
  - (b) in any other case, the consumer's tap.
- (4) Water supplied for regulation 4(1) purposes shall be regarded as unwholesome for the purposes of Part VI A of the Act if, on transfer from a treatment works for supply for those purposes—
- (a) it contains a concentration of the coliform bacteria or E. coli. parameter (items 1 and 2 in Part II of Table A in Schedule 1) in excess of the prescribed concentrations; or
  - (b) it contains a concentration of nitrite in excess of 0.1 mgNO<sub>2</sub>/l.
- (5) Subject to paragraph (6), water supplied for regulation 4(1) purposes shall be regarded as unwholesome for the purposes of Part VI A of the Act if, on transfer from a service reservoir for supply for those purposes, it contains a concentration of the coliform bacteria or E. coli parameter in excess of the prescribed concentrations.
- (6) Water transferred from a service reservoir for supply for regulation 4(1) purposes shall not be regarded as unwholesome for the purposes of Part VI A of the Act because the maximum concentration for the coliform bacteria parameter listed in Part II of Table A in Schedule 1 is exceeded if, as regards the samples taken in any year in which the reservoir in question is in use, the results of analysis for that parameter establish that in at least 95% of those samples coliforms were absent.

## PART IV

### MONITORING OF WATER SUPPLIES

#### Interpretation and application

5.—(1) In this Part, “audit monitoring” means monitoring for the purpose of obtaining information from which it may be established—

- (a) as regards the parameters listed in Tables A and B in Schedule 1, whether water supplied for regulation 4(1) purposes satisfies the provisions of Part III of these Regulations or, if a departure has been authorised under Part VI in relation to that supply, those provisions as read with the terms of that departure; and
- (b) as regards indicator parameters in Schedule 2, whether water supplied for regulation 4(1) purposes meets the specifications for those parameters.

(2) In this Part, “check monitoring” means monitoring for the purpose of obtaining information at regular intervals—

- (a) as to the organoleptic and microbiological quality of water; and
- (b) where relevant, as to the effectiveness of drinking-water treatment (particularly of disinfection),

for the purpose of determining—

- (i) as regards the parameters listed in Tables A and B in Schedule 1, whether water supplied for regulation 4(1) purposes satisfies the provisions of Part III of these Regulations or, if a departure has been authorised under Part VI in relation to that supply, those provisions as read with the terms of that departure; and

(ii) as regards indicator parameters listed in Schedule 2, whether water supplied for regulation 4(1) purposes meets the specifications for those parameters.

(3) This Part applies to water supplied for regulation 4(1) purposes by a water authority in the performance of its duties under Part VI A of the Act.

### Monitoring: general provisions

6.—(1) For the purpose of determining whether water to which this Part applies satisfies the provisions of Part III or, if a departure has been authorised under Part VI in relation to that supply, those provisions as read with the terms of that authorisation, a water authority shall take, or cause to be taken, and analyse, or cause to be analysed, not less than the number of samples of the water within each of its water supply zones specified in, or in accordance with the provisions of, this Part.

(2) Except in a case to which paragraph (3) applies, the parameters listed in Tables A and B in Schedule 1 and the indicator parameters in Schedule 2 shall be subject—

- (a) as regards a parameter listed in column (2) of Table 1 in Schedule 3, in relation to which there is no entry in column (3) of that Table, to check monitoring;
- (b) as regards a parameter so listed in relation to which there is an entry in column (3), check monitoring in the circumstances specified in that column;
- (c) in any other case, audit monitoring.

(3) Where—

- (a) the distribution of water in any part of a water supply zone is by tanker; and
- (b) is or is likely to be an intermittent short-term supply,

samples of water from each tanker from which water is distributed shall be taken 48 hours after the commencement of the distribution from that tanker and every 48 hours thereafter until the distribution is discontinued.

(4) Of the samples taken in accordance with paragraph (3) in relation to each distribution, the first shall be analysed for compliance with the parameters *E. Coli*, hydrogen ion and conductivity (item 2 in Part I of Table A in Schedule 1, item 3 in Part II of Table B in Schedule 1 and item 6 in Schedule 2, respectively), and the second and any subsequent samples shall be analysed for compliance with those and every other parameter.

(5) For the purposes of the application of paragraph (2)(b) to the aluminium, *clostridium perfringens*, iron and manganese parameters (items 1, 3, 10 and 11 in Table 1 in Schedule 3), a supply which consists of both ground waters and surface water shall be deemed to be a supply which consists only of surface water.

(6) The copper, lead and nickel parameters and, subject to paragraph (7), the parameters relevant to radioactivity (total indicative dose and tritium), shall be monitored in such manner as the Scottish Ministers shall specify from time to time by notice in writing (or in electronic form) given to each water authority.

(7) If, in relation to any water supply zone, the Scottish Ministers are satisfied that water supplied to that zone for regulation 4(1) purposes—

- (a) gives rise to a calculated total indicative dose in respect of radioactivity that is well below the specification; or
- (b) contains levels of tritium that are well below the specification,

they shall notify the water authority who supplies water to that zone that the total indicative dose parameter (item 8 in Schedule 2) or, as the case may be, the tritium parameter (item 10 in Schedule 2) need not be monitored.

(8) The Scottish Ministers shall, by notice in writing (or in electronic form)—

- (a) withdraw a notice under paragraph (7) given in relation to the total indicative dose parameter if they believe that water supplied to the zone in question for regulation 4(1) purposes gives rise to a calculated total indicative dose in respect of radioactivity that is not well below the specification;
- (b) withdraw a notice under paragraph (7) given in relation to the tritium parameter if they believe that water supplied to the zone in question for regulation 4(1) purposes contains levels of tritium that are not well below the specification.

(9) A water authority which receives a notice under paragraph (8) shall then monitor the total indicative dose parameter or, as the case may be, the tritium parameter in accordance with the notice having effect for the time being under paragraph (6).

### **Determination of sampling points**

7. Except in relation to water supplied from a tanker, sampling points in respect of every parameter, other than a parameter for which samples are taken from a supply point authorised by or under regulation 8, shall be selected at random unless, by notice in writing (or in electronic form acceptable to them) to a water authority (whether or not on the application of that authority), the Scottish Ministers otherwise direct.

### **Authorisation of supply points**

8.—(1) The Scottish Ministers, being satisfied that analysis of samples taken from—

- (a) any blending point;
- (b) the water leaving any service reservoir which receives water from a treatment works before its supply to any consumer; and
- (c) the water leaving any treatment works,

will produce data in respect of the parameters specified in Table 3 of Schedule 3 which are unlikely to differ in any material respect from the data that would be produced in respect of those parameters from analysis of samples obtained from sampling points, authorise the use for the purposes of regulation 6 of samples in relation to those parameters taken for a water supply zone from a blending point, a service reservoir of that description or a treatment works.

(2) Subject to paragraph (3), the Scottish Ministers may, in relation to any parameter other than a parameter specified in Table 3 in Schedule 3, on the application in writing or in electronic form of a water authority, authorise the use for the purposes of regulation 6 of samples taken for a water supply zone otherwise than from a sampling point, and any such authorisation may extend to all samples in relation to that parameter or to such number or proportion of those samples as is specified in the authorisation.

(3) The Scottish Ministers shall not grant an authorisation under paragraph (2) unless they are satisfied that analysis of samples taken from a point other than a sampling point will produce data in respect of the parameter in question which are unlikely to differ in any material respect from the data that would be produced in respect of that parameter from analysis of samples obtained from sampling points.

(4) Subject to paragraph (5), the Scottish Ministers may at any time modify or revoke an authorisation under paragraph (2).

(5) Unless it appears to the Scottish Ministers that the immediate modification or revocation of an authorisation under paragraph (2) is required in the interests of public health, they shall not modify or revoke such an authorisation without giving to the water authority to which the authorisation relates at least six weeks' notice of their intention to modify or revoke.

(6) A water authority shall notify the Scottish Ministers as soon as it has reasonable grounds for believing that an analysis of samples taken for a water supply zone from a point other than a sampling point would produce data in respect of the parameter in question which would differ in a material respect from the data produced by an analysis of samples taken from any of the sampling points within that zone; and the Scottish Ministers shall thereupon, and without the need for prior notice to the water authority, revoke the authorisation.

### Numbers of samples

9.—(1) Subject to paragraph (2), in each year a water authority shall take, or cause to be taken—

- (a) from its sampling points; or
- (b) to the extent authorised by or under regulation 8, from its supply points,

the standard number of samples for analysis as regards residual disinfectant and each parameter listed in column (1) of Table 2 in Schedule 3 or, as the case may be, Tables 3 or 4 in that Schedule.

(2) Where, in respect of a parameter subject to check monitoring—

- (a) a water authority is of the opinion that the quality of water supplied by it to a water supply zone is unlikely to deteriorate; and
- (b) in each of two successive years the results of samples taken, subject to paragraph (3), in accordance with these Regulations show no significant variation and—
  - (i) if the parameter is colony counts, have shown no abnormal change;
  - (ii) if the parameter in question is hydrogen ion concentration (item 9 in Table 1 in Schedule 3), have established a pH value that is not less than 6.5 and not more than 9.5;
  - (iii) in any other case, have established a concentration or value for that parameter that is significantly lower than the prescribed concentration or value, or specification,
 the number of samples to be taken in the following year for that parameter may be the reduced number.

(3) Where the following year is 2004, paragraph (2)(b) shall apply as if for “these Regulations” there were substituted “the 1990 Regulations”; and where the following year is 2005, paragraph (2)(b) shall apply as if before “these Regulations” there were inserted “the 1990 Regulations and”.

(4) Samples required to be taken by this regulation shall be taken at regular intervals.

(5) In this regulation—

- (a) in relation to water supply zones, residual disinfectant or a parameter and the supply of water to an estimated population within one of the ranges shown in column (2) of Table 2 in Schedule 3, “the reduced number” and the “standard number” mean the number shown in column (3) and column (4), respectively, of that Table as applicable to that substance or parameter by reference to a population within that range; and
- (b) in relation to supply points, each of the parameters specified in Table 3 of Schedule 3, and the supply of a volume of water within one of the ranges shown in column (3) of that Table, “the reduced number” and “the standard number” mean the number shown in column (4) and column (5), respectively, of that Table as applicable to that parameter by reference to a volume supplied within that range.

### Sampling: further provisions

10. As soon as a water authority has reasonable grounds for believing that any element, organism or substance, other than residual disinfectant or a parameter, whether alone or in combination with a

parameter or any other element, organism or substance, may cause the supply within any of its water supply zones to be a supply which does not satisfy—

- (a) the provisions of Part III of these Regulations or;
- (b) if a departure has been authorised under Part VI, those provisions as read with the terms of that authorisation,

it shall take, or cause to be taken, sufficient samples from water within that zone (whether from a service reservoir, a treatment works or otherwise) in respect of that element, organism or substance, in order to establish whether that water is wholesome.

## PART V

### MONITORING – ADDITIONAL PROVISIONS

#### Interpretation

**11.** In this Part, in relation to residual disinfectant or a parameter specified in Table 4 of Schedule 3, and the supply of a volume of water within one of the ranges shown in column (3) of that Table, “the reduced number” and “the standard number” mean the number shown in column (4) and column (5), respectively, of that Table as applicable to residual disinfectant or the parameter in question by reference to a volume of water within that range.

#### Sampling for particular substances and parameters

**12.** For the purposes of establishing the quality of water to be supplied to any of its water supply zones, a water authority shall take, or cause to be taken, and analyse, or cause to be analysed, not less than the number of samples specified in this Part.

#### Sampling at treatment works

**13.—(1)** Subject to paragraphs (2) and (4), in each year a water authority shall take, or cause to be taken, from the point at which water leaves each treatment works which serves its water supply zones, the standard number of samples for analysis—

- (a) for determining the concentration of residual disinfectant;
- (b) for determining whether, in relation to the colony counts and turbidity parameters, water leaving treatment works meets the specifications for those parameters set out in Schedule 2; and
- (c) for testing for compliance with the prescribed concentrations or values set out in Schedule 1 in respect of the coliform bacteria, *E. coli* and nitrite parameters for water leaving treatment works.

(2) Where in each of two successive years the results of the analysis of samples taken, subject to paragraph (3), in accordance with these Regulations have established—

- (a) in respect of the coliform bacteria, *E. coli* or nitrite parameter, that the maximum concentration has not been exceeded;
- (b) in respect of the turbidity parameter that the specification has been met;
- (c) in respect of the colony counts parameter, that there has been no significant increase,

the number of samples to be taken in respect of that parameter in the next following year from the point at which water leaves that treatment works may, subject to paragraph (4), be the reduced number.

- (3) Paragraph (2) shall apply—
- (a) where the following year is 2004, as if for “these Regulations” there were substituted “the 1990 Regulations”; and
  - (b) where the following year is 2005, as if before “these Regulations” there were inserted “the 1990 Regulations and”.
- (4) In respect of the coliform bacteria parameter and the *E. coli* parameter, the reduced number of samples may be taken in accordance with paragraph (2) only if the water authority is of the opinion—
- (a) that there is no foreseeable risk that the supply will exceed the maximum concentration for that parameter; or
  - (b) that the treatment works is designed to secure that, in the event of a failure of the disinfection process, water that has not been disinfected cannot enter the supply.
- (5) Samples required to be taken by this regulation shall be taken at regular intervals.

### Sampling at service reservoirs

14. A water authority shall take, or cause to be taken, from each of its service reservoirs in each week in which the reservoir is in use, one sample for analysis—

- (a) for testing for compliance with the prescribed concentrations or values in respect of the *E. coli* and coliform bacteria parameters set out in Part II of Table A to Schedule 1;
- (b) for determining the concentration of residual disinfectant; and
- (c) for determining whether the specification in relation to the colony counts parameter set out in Schedule 2 is met.

### Sampling: new sources

15.—(1) This regulation applies as respects—

- (a) any source which has not been used for the supply of water by a water authority at any time since 25th December 2003; and
- (b) any source which has been so used but not so used for a period of six months preceding the date on which the water authority proposes to supply water from it.

(2) A water authority shall—

- (a) before it supplies water from a source mentioned in paragraph (1)(a); and
- (b) as soon as is reasonably practicable after it has begun to supply water from a source mentioned in paragraph (1)(b),

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

- (i) whether water can be supplied from that source without contravening section 76A(1) of the Act; and
- (ii) the treatment necessary to ensure that section 76A(2) of the Act is complied with in relation to the supply of that water.

(3) Samples shall be taken—

- (a) in the case of a source mentioned in paragraph (1)(a), in respect of—
  - (i) the parameters listed in Schedules 1 and 2; and
  - (ii) any other element, organism or substance which, in the opinion of the water authority, may cause the supply to contravene section 76A(1) of the Act;
- (b) in the case of a source mentioned in paragraph (1)(b), in respect of—

- (i) the parameters listed in Table A in Schedule 1;
- (ii) the conductivity, hydrogen ion and turbidity parameters; and
- (iii) any other parameter as regards which the water authority is of the opinion that its concentration or value is likely to have altered since the last occasion on which water from that source was analysed.

### Collection and analysis of samples

16.—(1) A water authority shall secure, so far as is reasonably practicable, that in taking, handling, transporting, storing and analysing any sample required to be taken for the purposes of Part IV or this Part of these Regulations, or causing any such sample to be taken, handled, transported, stored and analysed, the appropriate requirements are satisfied.

(2) In paragraph (1) “the appropriate requirements” means such of the following requirements as are applicable—

- (a) the sample is representative of the quality of the water at the time of sampling;
- (b) the sample is not contaminated when being taken;
- (c) the sample is kept at such temperature and in such conditions as will secure that there is no material alteration of the concentration or value or specification for the measurement or observation for which the sample is intended;
- (d) the sample is analysed as soon as may be after it has been taken—
  - (i) by or under the supervision of a person who is competent to perform that task; and
  - (ii) with the use of such equipment as is suitable for the purpose;
- (e) any laboratory at which samples are analysed has a system of analytical quality control that is subjected from time to time to checking by a person who is—
  - (i) not under the control of either the laboratory or the water authority; and
  - (ii) approved by the Scottish Ministers for that purpose.

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

(4) A water authority shall maintain such records as are sufficient to enable it to establish, in relation to each sample taken for the purposes of Part IV or this Part of these Regulations, that such of the appropriate requirements as are applicable to that sample have been satisfied.

(5) Subject to paragraph (7), for the purpose of establishing, within acceptable limits of deviation and detection, whether the sample contains concentrations or values which contravene the prescribed concentrations or values, or exceed the specifications for indicator parameters—

- (a) the method of analysis specified in column (2) of Table A1 in Schedule 4 shall be used for determining compliance with the parameter specified in relation to that method in column (1);
- (b) the method of analysis used for determining compliance with a parameter specified in column (1) of Table A2 in Schedule 4 must be capable, at the time of use—
  - (i) of measuring concentrations and values equal to the parametric value with the trueness and precision specified in relation to that parameter in columns (2) and (3) of that Table; and
  - (ii) of detecting the parameter at the limit of detection specified in relation to that parameter in column (4) of that Table;

- (c) the method of analysis used for determining compliance with the hydrogen ion parameter must be capable, at the time of use, of measuring concentrations equal to the parametric value with a trueness of 0.2 pH unit and a precision of 0.2 pH unit; and
- (d) the method of analysis used for the odour and taste parameters must be capable, at the time of use, of measuring values equal to the parametric value with a precision of 1 dilution number at 25°C.
- (6) For the purposes of paragraph (5)–  
“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
- (b) five times the relative within batch standard deviation of a blank sample;
- “precision” (the random error) is to be calculated as twice the standard deviation (within a batch and between batches) of the spread of result about the mean; and
- “trueness” (the systematic error) is to be calculated as the difference between the mean value of the large number of repeated measurements and the true value.
- (7) Subject to paragraph (9), the Scottish Ministers may, on the application of any person, authorise a method of analysis other than that specified in paragraph (5)(a) (“the prescribed method”).
- (8) An application for the purpose of paragraph (7) shall be made in writing (or in electronic form acceptable to the Scottish Ministers) and shall be accompanied by–
- (a) a description of the method of analysis; and
- (b) the results of the tests carried out to demonstrate the reliability of that method and its equivalence to the prescribed method.
- (9) The Scottish Ministers shall not authorise the use of the method proposed in the application unless they are satisfied that the results obtained by the use of that method are at least as reliable as those produced by the use of the prescribed method.
- (10) An authorisation under paragraph (7) may be subject to such conditions as the Scottish Ministers think fit.
- (11) The Scottish Ministers may at any time by notice in writing (or in electronic form) served on the water authority to whom an authorisation under paragraph (7) has been given revoke the authorisation, but no such notice shall be served later than 3 months before the date on which the revocation is stated to take effect.

## PART VI

### INVESTIGATIONS, AUTHORISATION OF DEPARTURES AND REMEDIAL ACTION

#### **Investigations: Schedule 1 parameters**

- 17.—(1) Subject to paragraph (3), where a water authority has reason to believe that water supplied by it for regulation 4(1) purposes–
- (a) fails, or is likely to fail, to satisfy a requirement of paragraph (2) of regulation 4; or
- (b) is to be regarded as unwholesome by virtue of paragraph (4) of that regulation; or
- (c) if paragraph (6) of that regulation were ignored, would be regarded as unwholesome by virtue of paragraph (5) of that regulation,

the water authority shall immediately take such steps as are necessary to identify the matters specified in paragraph (2) below.

- (2) The matters referred to in paragraph (1) are—
  - (a) the cause and extent of the failure, or as the case may be, the apprehended failure;
  - (b) the Schedule 1 parameters in respect of which the prescribed concentration or value has not been, or is unlikely to be, achieved; and
  - (c) in relation to each parameter so identified, whether the failure, or apprehended failure, to achieve the prescribed concentration or value is attributable—
    - (i) to the domestic distribution system;
    - (ii) to the maintenance of that system; or
    - (iii) to neither of those matters.
- (3) Where a departure has been authorised under Part VI—
  - (a) paragraph (1) shall apply only in respect of the Schedule 1 parameters (if any) that are not specified in the authorisation; and
  - (b) a water authority which has reason to believe that water supplied by it for regulation 4(1) purposes fails, or is likely to fail, to satisfy the concentration or value required by the authorisation in relation to any Schedule 1 parameter, shall immediately take such steps as are necessary to identify the matters specified in paragraph (4).
- (4) The matters referred to in paragraph (3) are—
  - (a) the cause and extent of the failure or, as the case may be, the apprehended failure;
  - (b) the Schedule 1 parameters in respect of which the required concentration or value has not been, or is unlikely to be, achieved; and
  - (c) in relation to each parameter so identified, whether the failure, or apprehended failure, to achieve that concentration or value is attributable—
    - (i) to the domestic distribution system;
    - (ii) to the maintenance of that system; or
    - (iii) to neither of those matters.
- (5) As soon as may be after the matters specified in paragraph (2) or (4), as the case may be, have been identified, the water authority shall notify the Scottish Ministers—
  - (a) of those matters;
  - (b) in relation to each parameter identified in accordance with paragraph (2)(b) or (4)(b), whether it is the opinion of the water authority that a failure in respect of that parameter is likely to recur; and
  - (c) of the action (if any) taken by the water authority in relation to a failure which is attributable to the domestic distribution system or the maintenance of that system.
- (6) Where the water authority has identified a failure attributable to the domestic distribution system or to the maintenance of that system, it shall, at the same time as notice is given under paragraph (5)—
  - (a) by notice in writing (or in electronic form) to those of its consumers—
    - (i) to whom it supplies water for regulation 4(1) purposes; and
    - (ii) who are likely to be affected by the failure,inform them of the nature of the failure and provide details of the steps (if any) that, in the opinion of the water authority, it is necessary or desirable for those consumers to take in the interests of their health; and

(b) send a copy of that notice to the Scottish Ministers and to each appropriate local authority.

(7) A water authority which has complied with the requirements of paragraph (5) and (6) need not, in respect of the same failure or apprehended failure, comply with the requirements of regulation 31(9).

(8) Where such a failure as is mentioned in paragraph (6) affects the supply of water to the public in premises in which water is so supplied, the water authority shall, as soon as may be, notify such persons as the Scottish Ministers may from time to time determine for the purposes of this paragraph of the matters of which notice is given to consumers in accordance with paragraph (6)(a).

(9) Where such a failure as is mentioned in paragraph (1) relates to the copper or lead parameter, the water authority shall, as soon as reasonably practicable after the occurrence, modify or replace such of its pipes and their associated fittings as it knows or has reason to believe have the potential for contributing to copper or lead in the water supplied to the premises, so as to eliminate that potential (whether or not the presence of copper or lead in those pipes contributed to the failure).

### **Investigations: Schedule 2 indicator parameters**

**18.**—(1) Where a water authority has reason to believe that water supplied by it for regulation 4(1) purposes does not meet the specifications for indicator parameters set out in Schedule 2, it shall take such steps as are necessary to identify—

- (a) the reason why the specifications are not met;
- (b) the indicator parameters in respect of which the specifications are not met; and
- (c) if the specification for the coliform bacteria or colony count parameter (items 4 and 5 in Schedule 2) is not met, whether the inability to meet that specification is attributable—
  - (i) to the domestic distribution system;
  - (ii) to the maintenance of that system; or
  - (iii) to neither of those matters.

(2) As soon as may be after the matters specified in paragraph (1) have been identified, the water authority shall notify the Scottish Ministers—

- (a) of those matters; and
- (b) in relation to each parameter identified in accordance with paragraph (1)(b), whether it is the opinion of the water authority that a recurrence of the inability to meet the specification in respect of that parameter is likely.

(3) Where, in a case to which paragraph (1)(c) applies, the inability to meet the specification has been identified as attributable to the domestic distribution system or to the maintenance of that system, the water authority shall, at the same time as notice is given under paragraph (2)—

- (a) notify in writing (or in electronic form) those of its consumers—
  - (i) to whom it supplies water for regulation 4(1) purposes; and
  - (ii) who are likely to be affected,

of the nature of the problem and provide details of the steps (if any) that, in the opinion of the water authority, it is necessary or desirable for those consumers to take in the interests of their health; and

- (b) send a copy of the notice to the Scottish Ministers and to each appropriate local authority.

(4) Where such an inability as is mentioned in paragraph (3) is, in the opinion of the water authority, likely to affect the supply of water to the public in premises in which water is so supplied, it shall, at the same time as notice is given under paragraph (2), notify such persons as the Scottish Ministers may from time to time determine for the purposes of this paragraph of the matters of which notice is given to consumers in accordance with paragraph (3)(a).

### Action by the Scottish Ministers

19.—(1) Where—

- (a) a notification given in accordance with paragraph (5) of regulation 17 in the circumstances mentioned in paragraph (1) of that regulation (including that paragraph as read with paragraph (3)(a) of that regulation)—
  - (i) discloses a failure in respect of a parameter specified in Part II of Table A or in Table B in Schedule 1; and
  - (ii) that the failure is not attributable to the domestic distribution system or the maintenance of that system; and
- (b) it appears to the Scottish Ministers that the failure in respect of that parameter is not trivial and is likely to recur,

the Scottish Ministers may, by notice in writing (or in electronic form) to the water authority, require that authority to seek a departure in accordance with regulation 20.

(2) The exercise by the Scottish Ministers of the power conferred by paragraph (1) shall not preclude the exercise by them, in relation to the same circumstances, of the power conferred by section 76E of the Act.

(3) Where—

- (a) a notification given in accordance with paragraph (5) of regulation 17 in the circumstances mentioned in paragraph (3)(b) of that regulation discloses—
  - (i) a failure in relation to any parameter specified in Part II of Table A or in Table B in Schedule 1; and
  - (ii) that the failure is not attributable to the domestic distribution system or the maintenance of that system; and
- (b) it appears to the Scottish Ministers that the failure in respect of that parameter is not trivial and is likely to recur,

the Scottish Ministers shall consider whether the terms of the authorisation under regulation 20 should be modified.

(4) Where—

- (a) a notification given in accordance with regulation 18(2) discloses an inability to meet the specification applicable to an indicator parameter; and
- (b) the Scottish Ministers consider that the inability is likely to pose a risk to human health,

they may, by notice in writing (or in electronic form) to the water authority, require the water authority to take such steps as may be determined by them and specified in the notice.

(5) It shall be the duty of a water authority to which a notice under paragraph (4) has been given to take the steps specified in the notice.

### Authorisation of temporary supply of water that is not wholesome

20.—(1) Subject to paragraph (2), the Scottish Ministers may, upon the written application of a water authority (or in electronic form acceptable to them), authorise in accordance with regulation 21 a departure from the provisions of Part III of these Regulations in so far as they relate to—

- (a) a parameter specified in Part II of Table A in Schedule 1 or in Table B in Schedule 1; and
- (b) the supply of water by that authority in any of its water supply zones.

(2) The Scottish Ministers shall not authorise a departure under paragraph (1) unless they are satisfied—

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- (a) that the authorisation is necessary to maintain in that zone a supply of water for regulation 4(1) purposes;
  - (b) that a supply of water for those purposes cannot be maintained in that zone by any other reasonable means; and
  - (c) that the supply of water in accordance with the authorisation does not constitute a potential danger to human health.
- (3) A water authority shall provide with its application—
- (a) a statement—
    - (i) of the grounds on which the authorisation is sought;
    - (ii) of the water supply zone in respect of which the authorisation is sought;
    - (iii) of the parameters in respect of which the prescribed concentration or value cannot be met;
    - (iv) in respect of each parameter to which paragraph (iii) applies, of the results of the analysis of the samples taken in the water supply zone in question during the 12 months immediately preceding the first day on which the prescribed concentration or value could not be met;
    - (v) in respect of each parameter to which paragraph (iii) applies, of the results of the analysis of the samples (if any) taken in the water supply zone in question between the first day on which the prescribed concentration or value could not be met and the date of the application;
    - (vi) of the average daily quantity of water supplied to that zone or, if that quantity cannot readily be ascertained, of the average daily quantity of water supplied from the treatment works that supplies water to that zone;
    - (vii) of the estimated population of that zone;
    - (viii) as to whether, if a departure were authorised in the terms sought, any relevant food-production undertaking would be affected;
    - (ix) of the period for which the authorisation is sought; and
    - (x) of the reasons why the supply cannot be maintained by other reasonable means;
  - (b) a scheme for monitoring the quality of water supplied in the zone during the period for which the authorisation is sought; and
  - (c) a summary of the steps that it proposes to take in order to secure that the supply fully satisfies the requirements of Part III, including—
    - (i) a timetable for the work;
    - (ii) an estimate of the cost of the work; and
    - (iii) provisions for reviewing the progress of the work and for reporting the result of the review to the Scottish Ministers.
- (4) At the same time as it makes an application for an authorisation under paragraph (1), the water authority shall serve on—
- (a) every appropriate local authority;
  - (b) every appropriate health board; and
  - (c) the Water Industry Commissioner for Scotland <sup>M8</sup>,

a copy of the application and of the statement, scheme and summary referred to in paragraph (3).

(5) A body on whom documents have been served in accordance with paragraph (4) may make representations to the Scottish Ministers in connection with the application; and any such

representations shall be made not later than the end of the period of 30 days beginning with the date on which the application for the authorisation is made.

#### Marginal Citations

**M8** The Water Industry Commissioner was established by virtue of section 67A of the Local Government etc. (Scotland) Act 1994 c.39.

#### Authorisations: terms and conditions

**21.**—(1) Subject to paragraph (2), a departure may be authorised under regulation 20 for such period as is in the Scottish Ministers' opinion reasonably required for securing a supply of water for regulation 4(1) purposes that fully satisfies the requirements of Part III ("the departure period").

(2) No departure period shall exceed three years.

(3) Subject to paragraph (4), an authorisation under regulation 20—

(a) shall specify—

(i) the grounds on which it is granted;

(ii) every water supply zone in respect of which it is granted;

(iii) the extent to which a departure from the prescribed concentration or value of any parameter is authorised;

(iv) in respect of each parameter to which paragraph (iii) applies, the results of the analysis of the samples taken in the water supply zone in question during the 12 months immediately preceding the first day on which the prescribed concentration or value could not be met;

(v) in respect of each parameter to which paragraph (iii) applies, the results of the analysis of the samples (if any) taken in each water supply zone in question between the first day on which the prescribed concentration or value could not be met and the date of the application;

(vi) the average daily quantity of water supplied from each of those zones or, if that quantity cannot readily be ascertained, the average daily quantity of water supplied from the treatment works that supplies water to that zone;

(vii) the estimated population of each of those zones;

(viii) whether or not any relevant food-production undertaking would be affected; and

(ix) the departure period; and

(b) shall require the implementation of a scheme for monitoring the quality of water supplied in each of those zones during the departure period (which may be, but need not be, the scheme submitted in accordance with regulation 20(3)(b)); and

(c) shall require the carrying out of the steps which, in their opinion, are reasonably required in order to secure that the supply fully satisfies the requirements of Part III (whether or not the steps are those proposed in the summary submitted in accordance with regulation 20(3)(c)); and

(d) shall specify, in relation to those steps—

(i) the timetable for the work;

(ii) an estimate of the cost of the work; and

(iii) provisions for reviewing the progress of the work and for reporting to them the result of the review; and

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- (e) require the taking of such steps as may be specified to give to the population within the water supply zones to which the authorisation applies and, in particular, to those groups of that population for which the supply of water in accordance with the authorisation could present a special risk, advice as to the measures (if any) that it would be advisable in the interests of their health for persons within that population or those groups to take for the whole or any part of the departure period.

(4) Where the Scottish Ministers are of the opinion—

- (a) that the extent of the contravention of the requirements of Part III as respects any parameter is trivial; and
- (b) that the prescribed concentration or value as respects that parameter is likely to be achieved within the period of 30 days beginning with the day on which the prescribed concentration or value in respect of that parameter was contravened,

the particulars to be specified in the authorisation shall be those required by paragraph (3)(a) (iii) and (ix), and sub-paragraphs (b) to (e) of that paragraph shall not apply.

(5) Where it appears to the Scottish Ministers that a supply of water that fully satisfies the requirements of Part III cannot be restored by the end of the departure period, they may authorise a further departure.

(6) Paragraphs (1) to (4) shall apply to a further departure as they apply to a departure authorised under regulation 20.

(7) Where it appears to the Scottish Ministers that a supply of water that fully satisfies the requirements of Part III cannot be restored by the end of the departure period relevant to an authorisation under paragraph (5), they may, in accordance with Article 9(2) of Council Directive 98/83/EC<sup>M9</sup>, authorise a third departure.

(8) Paragraph (3) shall apply to any departure authorised under paragraph (7) as it applies to a departure authorised under regulation 20, but with the substitution for the words “Subject to paragraph (4)” of the words “ Subject to any decision of the Commission ”.

#### Marginal Citations

M9 O.J. No. L 330, 5.12.98.

#### Authorisations: other limitations

22. An authorisation under regulation 20 or regulation 21 may be limited to water supplied—

- (a) from particular sources or classes of source;
- (b) to particular water supply zones or to zones of particular descriptions.

#### Publicity for authorisations

23. As soon as reasonably practicable after a departure has been authorised, the water authority shall—

- (a) inform the population affected of the departure and of the conditions governing it—
  - (i) except in a case to which paragraph (4) of regulation 21 applies, a notice containing a statement of the matters specified in paragraph (3)(a)(ii), (iii), (viii) and (ix) of that regulation;
  - (ii) in a case to which paragraph (4) of regulation 21 applies, and if Scottish Ministers so require, a notice containing a statement of the matters specified in paragraph (3) (a)(ii), (iii) and (ix) of that regulation;

- (b) give such other public notice of the authorisation and of its terms and conditions as the Scottish Ministers may, by notice in writing (or in electronic form) to the water authority, reasonably require.

### Revocation and modification of authorisations

**24.**—(1) Subject to paragraphs (2) and (3), the Scottish Ministers may at any time modify or revoke an authorisation under regulation 20; and regulations 21 and 22 shall apply as respects a modification as they apply as respects an authorisation.

(2) The Scottish Ministers shall not revoke or modify an authorisation under regulation 20 without giving at least six months' notice in writing (or in electronic form) of their intention to do so to—

- (a) the water authority to which the authorisation relates;
- (b) every appropriate local authority;
- (c) every appropriate health board; and
- (d) the Water Industry Commissioner for Scotland,

but they may revoke or modify an authorisation without notice if it appears to them that immediate revocation or modification is required in the interests of public health.

(3) A water authority on whose application a departure has been authorised under this Part shall notify the Scottish Ministers as soon as the circumstances which gave rise to the application cease to exist; and the Scottish Ministers shall thereupon revoke the authorisation without the need for prior notice.

## PART VII

### WATER TREATMENT

#### Treatment of raw water

**25.**—(1) In carrying out such of its functions under Part VI A of the Act as comprise the supply of water for regulation 4(1) purposes, a water authority shall not, subject to paragraph (2), supply water from any source which consists of or includes raw water unless the water has been disinfected and, in the case of surface water, subjected to at least such further treatment as is specified in paragraph (3).

(2) This paragraph shall not require a water authority to disinfect such ground waters as are specified in an authorisation given by the Scottish Ministers for the purposes of this paragraph.

(3) The further treatment mentioned in paragraph (1) is such treatment as is required to secure compliance with Council Directive [75/440/EC](#) (quality required of surface water intended for the abstraction of drinking water)<sup>M10</sup>; and for the purposes of this regulation, surface water shall be treated as falling within category A1 or A2 or A3 set out in Annex I to that Directive if it is abstracted from waters for which the classification to be currently satisfied in accordance with section 30B of the Control of Pollution Act 1974<sup>M11</sup> is, as appropriate, DW1 or DW2 or DW3, as set out in the Surface Waters (Abstraction for Drinking Water) (Classification) (Scotland) Regulations 1996<sup>M12</sup>.

(4) Except with the consent of the Scottish Ministers, water shall not be abstracted for supply for domestic purposes which include drinking except for waters to be treated as falling within category A1 or A2 or A3 in the Annex to Directive [75/440/EC](#).

#### Marginal Citations

**M10** O.J. No. L 194, 25.7.77, p.26.

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- M11** 1974 c.40; section 30B was inserted by the Water Act 1989, Schedule 23, paragraph 4.  
**M12** S.I. 1996/3047.

### Contamination from pipes

**26.**—(1) Where there is a risk (“the prescribed risk”) that water supplied by a water authority would, for the reason mentioned in paragraph (2), after leaving the authority’s pipes—

- (a) contain a concentration of copper in excess of 2mg/litre; or
- (b) contain a concentration of lead in excess of 10µg/litre,

the water authority shall, subject to paragraph (3), treat the water in such a way as will, in its opinion, eliminate the prescribed risk or reduce it to a minimum.

(2) The reason referred to in paragraph (1) is the presence in the water of a concentration of copper or lead which is attributable to the fact that copper or lead is the major component of such a pipe as is mentioned in section 76A(3)(a) of the Act, or its associated fittings.

(3) Paragraph (1) shall not require an authority to treat water—

- (a) if the treatment is unlikely to achieve a significant reduction in the concentration of copper or lead; or
- (b) in any water supply zone where the prescribed risk relates only to water supplied to an insignificant part of the zone; or
- (c) if treatment is not reasonably practicable.

(4) Where at any time in the period beginning with 25th December 2003 and ending immediately before 25th December 2013, a water authority—

- (a) has reason to believe that water supplied by it for regulation 4(1) purposes from a pipe to which paragraph (5) applies contains, at the consumer’s tap, a concentration of lead which exceeds 10•g/l but does not exceed 25•g/l; and
- (b) has received from the owner of premises to which water is so supplied notice in writing (or in electronic form)—
  - (i) of the owner’s intention to replace so much of the pipe as belongs to him; and
  - (ii) of his desire that the water authority replaces the remainder of the pipe,
 the water authority shall modify or replace its part of the pipe.

(5) This paragraph applies to a pipe—

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

### Application and introduction of substances and products

**27.**—(1) In this regulation—

“the Directive” means Council Directive [89/106/EEC](#) on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products <sup>M13</sup>;

“EEA State” means a State which is a contracting party to the agreement on the European Economic Area signed at Oporto on 2nd May 1992 <sup>M14</sup> as adjusted by the Protocol signed at Brussels on 17th March 1993 <sup>M15</sup>;

“European technical approval” means a favourable technical assessment of the fitness for use of a construction product for an intended use, issued for the purposes of the Directive by a body authorised by an EEA State to issue European technical approvals for those purposes and notified by that body to the European Commission; and

“harmonized standard” means a standard established as mentioned in the Directive by the European standards organisation on the basis of a mandate given by the European Commission and published by the Commission in the Official Journal of the European Communities.

(2) Subject to paragraph (3), a water authority shall not apply any substance or product to, or introduce any substance or product into, water which is to be supplied for regulation 4(1) purposes unless one of the requirements of paragraph (4) is satisfied.

(3) A substance or product which, at the time of its application or introduction, bears an appropriate CE marking in accordance with the Directive, or conforms to—

- (a) an appropriate harmonised standard or European technical approval; or
- (b) an appropriate British Standard or some other national standard of an EEA State which provides an equivalent level of protection and performance,

may be applied or introduced, notwithstanding that none of the requirements of paragraph (4) is satisfied; but any such application or introduction shall be subject to—

- (i) such national conditions of use restricting the dosing concentration as are for the time being in force in relation to such substances and products pursuant to a determination of the Scottish Ministers by an instrument in writing; and
- (ii) such other requirements, within the meaning of Council Directive [98/34/EC](#), as amended <sup>MI6</sup> (which lays down a procedure for the provision of information in the field of technical standards and regulations and of rules on information society services), in relation to such substances and products, as have been communicated to the Commission in the form of a draft technical regulation in accordance with Article 8 of that Directive, and whose adoption by a Member State has also been communicated to the Commission.

(4) The requirements of this paragraph are—

- (a) that the Scottish Ministers have for the time being approved the application or introduction of that substance or product and it is applied or introduced in accordance with any conditions attaching to that approval;
- (b) that the Scottish Ministers are satisfied that the substance or product either alone or in combination with any other substance or product in the water is unlikely to affect adversely the quality of the water supplied;
- (c) that the substance or product is to be applied or introduced solely for the purposes of testing or research, and the water authority has given to the Scottish Ministers not less than 3 months’ notice of their intention so to apply or introduce the substance or product.

(5) An application for such an approval as is mentioned in paragraph (4)(a) may be made by any person.

(6) If the Scottish Ministers decide to issue an approval under paragraph (4)(a), they may include in the approval such conditions as they consider appropriate and, subject to paragraph (10), may at any time revoke or vary any approval they have previously given.

(7) Where substances or products are applied or introduced in any case in which the requirement mentioned in paragraph (4)(c) is satisfied, their application or introduction shall be discontinued within 12 months of the date on which they were first applied or introduced or, if the Scottish Ministers by notice given in writing (or in electronic form) to the water authority so directs, within such other period (whether longer or shorter) as may be specified in the notice.

(8) The Scottish Ministers may, by notice given in writing (or in electronic form) to any water authority, prohibit it from applying to, or introducing into, water intended to be supplied for regulation 4(1) purposes any substance or product which the authority would otherwise be authorised to apply or introduce by virtue of—

- (a) paragraph (2) and any of sub-paragraphs (b) or (c) of paragraph (4); or
- (b) paragraph (3).

(9) A prohibition under paragraph (8) may be without limitation as to time or for such period as is specified in the notice.

(10) The Scottish Ministers may—

- (a) revoke by an instrument in writing (or in electronic form) any approval given by them under paragraph (4)(a);
- (b) modify any such approval by an instrument in writing (or in electronic form) by including conditions or varying existing conditions;
- (c) issue any such notice as is mentioned in paragraph (8):

but, unless they are satisfied that it is necessary to do so in the interests of public health without notice, shall not do any of those things without giving all such persons as are, in their opinion, likely to be affected by the revocation or modification of the approval or by the issue of the notice at least six months' notice in writing (or in electronic form) of their intention.

(11) Notice shall be given forthwith by the Scottish Ministers to all persons likely to be affected by the making of such an instrument as is mentioned in paragraph (10)(a) or (b).

(12) At least once in each year beginning with the year 2004, the Scottish Ministers shall issue a list of all the substances and products in relation to which—

- (a) an approval under paragraph (4)(a) has been granted or refused;
- (b) such an approval has been revoked or modified;
- (c) a notice has been issued under paragraph (8),

with particulars of the action taken.

#### Marginal Citations

**M13** O.J. No. L 40, 11.2.89, p.12.

**M14** Cmnd 2073.

**M15** Cmnd 2183.

**M16** O.J. No. L 204, 21.7.98, p.37 amended by Council Directive 98/48/EC (O.J. No. L 217, 5.8.98, p.18).

#### Use of processes

**28.—**(1) The Scottish Ministers may at any time by notice in writing (or in electronic form) given to a water authority require it to make an application to them for approval of the use of any process; and may prohibit it for such period as may be specified in the notice from using any such process in connection with the supply by it of water for regulation 4(1) purposes.

(2) The Scottish Ministers may refuse the application or impose on any approval given for the purposes of this regulation such conditions as they think fit and, subject to paragraph (3), may at any time by notice in writing (or in electronic form) to the water authority revoke an approval so given or modify or revoke any condition imposed by virtue of this paragraph.

(3) Subject to paragraph (4), the Scottish Ministers shall not—

- (a) revoke any approval given for the purposes of this regulation;

- (b) modify any condition imposed by virtue of paragraph (2); or
- (c) prohibit a water authority from using any process,

unless they have given to the water authority at least six months' notice in writing (or in electronic form) of their intention to revoke, modify or prohibit, as the case may be.

(4) Paragraph (3) shall not apply in any case in which the Scottish Ministers are of the opinion that the immediate revocation, modification or prohibition is necessary in the interests of public health.

(5) Paragraph (12) of regulation 27 shall apply for the purposes of this regulation as if—

- (a) for the reference to a substance or product there were substituted a reference to a process; and
- (b) for the reference to paragraph (4)(a) and paragraph (8) there were substituted a reference to this regulation and paragraph (1) of this regulation respectively.

## Offences

**29.**—(1) A water authority which applies or introduces any substance or product in contravention of regulation 27(2) or a notice given under regulation 27(8), or uses any process in contravention of a prohibition imposed under regulation 28(1) or without complying with a condition imposed by virtue of regulation 28(2) shall be guilty of an offence and liable—

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

(2) If any person furnishing any information or making any application under regulation 27 or 28, makes any statement which that person knows to be false in a material particular, or recklessly makes any statement which is false in a material particular, that person shall be guilty of an offence and liable—

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

## PART VIII

### RECORDS AND INFORMATION

#### Maintenance of records

**30.**—(1) A water authority shall prepare and maintain, in respect of each of its water supply zones, a record containing—

- (a) the name of the zone;
- (b) the name of every water treatment works, service reservoir and other supply point from which water is supplied to premises within the zone;
- (c) an estimate of the population of the zone;
- (d) particulars of any departure authorised under Part VI of these Regulations which applies to water supplied in the zone;
- (e) particulars of the action taken or required to be taken by the authority to comply with—
  - (i) any default order made under section 76E of the Act;
  - (ii) any departure authorised under Part VI; and
  - (iii) any notice under regulation 19(4).

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- (f) particulars of the result of any analysis of samples taken in accordance with Part IV of these Regulations or any of regulations 12 to 14; and
  - (g) such other particulars as the authority may determine.
- (2) An authority shall make—
- (a) initial entries in the record in respect of the matters mentioned in paragraph (1) (a) to (d) and (e)(ii) before 1st March 2004;
  - (b) entries in respect of the matters mentioned in paragraph (1)(e)(i) and (iii) within 28 days of the date of the order and notice respectively; and
  - (c) entries relating to the results of the analysis of samples within 28 days of the day on which the result is first known to the authority.
- (3) Without prejudice to paragraph (2), the authority shall at least once in each year review and bring up to date the record required to be kept by paragraph (1).
- (4) Nothing in this regulation shall require an authority to retain a record of any information mentioned in paragraph (1) at any time more than fifteen years after the date on which the information was first entered in the record.

### Provision of information

- 31.**—(1) A water authority shall make available for inspection by the public, in such places as it reasonably considers appropriate to ensure adequate accessibility to the public, at all reasonable hours and free of charge any record maintained by it in accordance with regulation 30.
- (2) A water authority shall afford to any person facilities to take or obtain a copy of any part of a record maintained in accordance with regulation 30—
- (a) in the case of information relating to that zone, free of charge if the person receives a supply of water in the zone;
  - (b) in any other case, on payment of such reasonable charge as the authority may determine.
- (3) A water authority shall include in or append to at least one of the accounts sent to each customer in any year a statement informing them—
- (a) that records of water quality may be inspected by the public free of charge; and
  - (b) of the address, telephone number and hours of opening of the office at which an inspection can be made.
- (4) A water authority shall, not later than 31st March 2005 and not later than 31st March in each year thereafter, supply to each local authority to any part of whose area the water authority supplied water in the preceding year, information concerning the general quality of water supplied during that year to premises in the area of such local authority, and
- (a) in respect of each treatment works from which water was so supplied, the particulars referred to in paragraph (5);
  - (b) in respect of each service reservoir, and every other supply point (other than a treatment works), from which water was so supplied, the particulars referred to in paragraph (6);
  - (c) in respect of—
    - (i) each water supply zone of which any part is within the area of such local authority; and
    - (ii) each parameter and residual disinfectant, the particulars referred to in paragraph (7); and
  - (d) information as to the action taken by the authority in that year to comply with—
    - (i) any default order made under section 76E to the Act;

- (ii) any departure authorised under Part VI; and
  - (iii) any notice under regulation 19(4).
- (5) The particulars referred to in this paragraph are–
  - (a) the names of the water supply zones supplied from the works during the preceding year;
  - (b) the results of any analysis of samples taken in the preceding year in accordance with Part IV of these Regulations, or any of regulations 12 or 13;
  - (c) in relation to those samples and each parameter other than an indicator parameter–
    - (i) the number and percentage of samples which contravened the prescribed concentration or value; and
    - (ii) if at the time that samples were taken a departure had been authorised in respect of that parameter, the number and percentage of samples which exceeded the concentration or value specified in the authorisation;
  - (d) in respect of each indicator parameter, the number and percentage of the samples taken in the preceding year which did not meet the specification for that parameter;
  - (e) in respect of each parameter other than an indicator parameter, the minimum, mean and maximum concentrations; and
  - (f) in respect of residual disinfectant and each indicator parameter, the minimum, mean and maximum concentrations or values or, where a state is specified in relation to any such parameter, a commentary on its state.
- (6) The particulars referred to in this paragraph are–
  - (a) the names of the water supply zones supplied from the service reservoir or, as the case may be, the supply point, during the preceding year;
  - (b) the results of any analysis of samples taken in the preceding year in accordance with Part IV of these Regulations, regulation 12 or regulation 14;
  - (c) in relation to those samples and each parameter other than an indicator parameter–
    - (i) the number and percentage of samples which contravened the prescribed concentration or value; and
    - (ii) if at the time that samples were taken a departure had been authorised in respect of that parameter, the number and percentage of samples which exceeded the concentration or value specified in the authorisation;
  - (d) in respect of each indicator parameter, the number and percentage of the samples taken in the preceding year which did not meet the specification for that parameter;
  - (e) in respect of each parameter other than an indicator parameter, the minimum, mean and maximum concentrations; and
  - (f) in respect of residual disinfectant and each indicator parameter, the minimum, mean and maximum concentrations or, values or, where a state is specified in relation to any such parameter, a commentary on the state.
- (7) The particulars referred to in this paragraph are–
  - (a) the number of samples taken in the preceding year;
  - (b) the result of any analysis of samples taken in the preceding year in accordance with Part IV of these Regulations;
  - (c) in relation to those samples and each parameter other than an indicator parameter–
    - (i) the number and percentage of samples which contravened the prescribed concentration or value; and

- (ii) if at the time that samples were taken a departure had been authorised in respect of that parameter, the number and percentage of samples which exceeded the concentration or value specified in the authorisation;
- (d) in respect of each indicator parameter, the number and percentage of the samples taken in the preceding year which did not meet the specification for that parameter;
- (e) in respect of each parameter other than an indicator parameter, the minimum, mean and maximum concentrations; and
- (f) in respect of residual disinfectant and each indicator parameter, the minimum, mean and maximum concentrations or values or, where a state is specified in relation to any such parameter, a commentary on the state.

(8) As soon as may be after the occurrence of any event which, by reason of its effect or likely effect on the water supplied by a water authority, gives rise or is likely to give rise to a significant risk to health of persons residing in the area of a local authority or health board, the water authority shall notify each such local authority, each such health board and the Water Industry Commissioner for Scotland of the occurrence of the event.

(9) A water authority shall send to the Scottish Ministers a copy of every notification given under paragraph (8).

(10) A local authority or health board who has received a notification under paragraph (8) may require the water authority to provide them with such information relating to the event and its consequences as they may reasonably require.

### Publication of information

**32.—**(1) A water authority shall, not later than 31st March 2005 and not later than 31st March in each year thereafter, publish a report relating to the preceding year containing—

- (a) a statement of the number of treatment works, service reservoirs and other supply points from which it supplied water during any part of the year;
- (b) a statement of the number of its water supply zones for the year;
- (c) in respect of water supplied from its treatment works, the particulars referred to in paragraph (4);
- (d) in respect of its service reservoirs and other supply points (other than treatment works), the particulars referred to in paragraph (5);
- (e) in respect of its water supply zones, the particulars referred to in paragraph (6);
- (f) a statement of the action taken by the water authority during the year to comply with—
  - (i) any default order made under section 76E of the Act;
  - (ii) any departure authorised under Part VI; and
  - (iii) any notice under regulation 19(4);
- (g) a statement that any person may, free of charge, inspect the records of water quality kept by the water authority in accordance with regulation 31; and
- (h) particulars of the times and places at which such inspection may be made.

(2) A report under paragraph (1) may include such other information as the water authority thinks fit.

(3) At the same time as it publishes a report in accordance with paragraph (1) the water authority shall send a copy of it to every local authority within whose area the water authority supplied water in the preceding year.

(4) The particulars referred to in this paragraph are—

- (a) the total number of samples taken from all of the water authority's treatment works in the preceding year in respect of residual disinfectant and each parameter;
  - (b) in relation to those samples and each parameter other than an indicator parameter—
    - (i) the number and percentage of samples which contravened the prescribed concentration or value; and
    - (ii) if at the time that samples were taken a departure had been authorised in respect of that parameter, the number and percentage of samples which exceeded the concentration or value specified in the authorisation;
  - (c) the number and percentage of treatment works at which samples of the descriptions mentioned in paragraphs (i) and (ii) of sub-paragraph (b) were produced;
  - (d) in relation to the samples mentioned in sub-paragraph (a) and each indicator parameter, the number and percentage of the samples which did not meet the specification for that parameter; and
  - (e) the number and percentage of treatment works at which samples of the description mentioned in sub-paragraph (d) were produced.
- (5) The particulars referred to in this paragraph are—
- (a) the total number of samples taken from all of the water authority's service reservoirs and other supply points (other than treatment works), in the preceding year in respect of residual disinfectant and each parameter;
  - (b) in relation to those samples—
    - (i) the number and percentage which contravened the prescribed concentration or value; and
    - (ii) if at the time that they were taken a departure had been authorised, the number and percentage which exceeded the concentration or value specified in the authorisation;
  - (c) the number and percentage of service reservoirs, and other supply points (other than treatment works), at which samples of the descriptions mentioned in paragraphs (i) and (ii) of sub-paragraph (b) were produced;
  - (d) in relation to the samples mentioned in sub-paragraph (a) and each indicator parameter, the number and percentage of the samples which did not meet the specification for that parameter; and
  - (e) the number and percentage of service reservoirs, and other supply points (other than treatment works), at which samples of the description mentioned in sub-paragraph (d) were produced.
- (6) The particulars referred to in this paragraph are—
- (a) the total number of samples taken from all of the water authority's water supply zones in the preceding year in respect of residual disinfectant and each parameter;
  - (b) in relation to those samples and each parameter other than an indicator parameter—
    - (i) the number and percentage of samples which contravened the prescribed concentration or value; and
    - (ii) if at the time that samples were taken a departure had been authorised in respect of that parameter, the number and percentage of samples which exceeded the concentration or value specified in the authorisation;
  - (c) the number and percentage of water supply zones at which samples of the descriptions mentioned in paragraphs (i) and (ii) of sub-paragraph (b) were produced;

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- (d) in relation to the samples mentioned in sub-paragraph (a) and each indicator parameter, the number and percentage of the samples which did not meet the specification for that parameter; and
- (e) the number and percentage of water supply zones at which samples of the description mentioned in sub-paragraph (d) were produced.

## PART IX

### FUNCTIONS OF LOCAL AUTHORITIES IN RELATION TO WATER QUALITY

#### **Application and interpretation**

**33.—**(1) This Part applies to the performance by a local authority of their duty under section 76F(1) of the Act insofar as that duty relates to water supplies which are not private supplies.

(2) In this Part “relevant water authority”, in relation to a local authority, means a water authority any of whose supply zones include an area which is situated within the area of that local authority.

#### **Duties of local authorities: supplementary provision**

**34.—**(1) In performing their duty under section 76F(1) of the Act (general functions of local authorities in relation to water quality), a local authority—

- (a) shall make such arrangements with the relevant water authority as will secure that the local authority is notified as mentioned in regulation 31(8); and
- (b) may take, or cause to be taken, and analyse, or cause to be analysed, by a person designated by them in writing (or in electronic form), such samples of the water supplied to premises in their area as they may reasonably require.

(2) Regulation 16 shall apply to samples taken by virtue of paragraph (1) as it applies to samples taken for the purposes of Parts IV and V of these Regulations; but with the following modifications—

- (a) in paragraph (1), for the words “A water authority” there shall be substituted the words “A local authority”; and
- (b) in paragraph (2)(e), after the words “the water authority” there shall be inserted the words “or the local authority”.

## PART X

### ENFORCEMENT

#### **Contraventions by water authorities**

**35.** Any duty or requirement imposed by Parts IV to VIII of these Regulations on a water authority shall be enforceable under section 76E of the Act by the Scottish Ministers, whether or not a failure to carry out the duty or requirement constitutes an offence.

## PART XI

### AMENDMENT AND REVOCATION OF REGULATIONS AND SAVING AND TRANSITIONAL PROVISION

#### **Amendment of the Water Supply (Water Quality) (Scotland) Regulations 1990**

**36.** The 1990 Regulations shall be amended, with effect from 31st January 2001, in accordance with Schedule 5.

#### **Transitional provision: programmes of work**

**37.—(1)** Every water authority which intends to supply water, on and after 25th December 2003, for regulation 4(1) purposes shall, not later than 25th September 2001 submit to the Scottish Ministers for their approval a programme of work designed to secure, so far as reasonably practicable—

- (a) that on the coming into force of Part III of these Regulations, the supply of water for those purposes fully satisfies the requirements of that Part; and
- (b) that on and after 25th December 2013, the supply of water for those purposes will fully satisfy the revised requirements of that Part in relation to the lead parameter (item 15 in Table B in Schedule 1),

and that, accordingly, section 76A (duties of water authorities with respect to water quality) of the Act is complied with.

- (2) Programmes of work shall be drawn up in accordance with the provisions of Schedule 6.
- (3) The Scottish Ministers may approve a programme of work with or without modification.
- (4) If a water authority—
  - (a) fails to draw up a programme of work;
  - (b) draws up such a programme otherwise than in accordance with Schedule 6; or
  - (c) draws up such a programme that is unsatisfactory in any other respect,

the Scottish Ministers may draw up a programme of work and any such programme shall be treated for the purposes of paragraphs (5) and (6) as a programme of work drawn up by the water authority and approved by the Scottish Ministers.

(5) Whenever it comes to the attention of a water authority that the steps to be taken in accordance with a programme of work submitted to, or approved by, the Scottish Ministers, or treated as so approved, are insufficient to secure that the requirements of paragraph (1)(a) and (b) are met, it shall notify the Scottish Ministers of the additional steps to be taken to secure that those requirements are met.

(6) The Scottish Ministers may at any time, and whether or not on the application of a water authority, modify any programme of work where they are of the opinion that such modification is required to secure that the requirements of paragraph (1)(a) and (b) are met.

- (7) It shall be the duty of each water authority—
  - (a) to take the steps for the time being specified in the programme of work approved or treated as approved in relation to its area of supply;
  - (b) to take those steps in accordance with the timetable so specified; and
  - (c) to submit reports to the Scottish Ministers at the times or within the periods specified.

(8) The duties imposed by paragraph (7) shall be enforceable under section 76E of the Act by the Scottish Ministers.

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### Transitional provision: authorisations

**38.**—(1) A water authority which—

- (a) intends to supply water, on and after 25th December 2003, for regulation 4(1) purposes; and
- (b) has reason to believe that water so supplied will not satisfy the requirements of Part III of these Regulations,

may apply to the Scottish Ministers for an authorisation under this regulation.

(2) An application under paragraph (1) shall be made not later than 25th September 2003.

(3) For the purpose of making and determining applications under paragraph (1) and publicising authorisations under this regulation, it shall be assumed—

- (a) that regulations 4 and 20 to 23 of these Regulations, and so much of any other provision of these Regulations as relates to those regulations (in so far as not already in force), were in force at the material time; and
- (b) that references in any provision specified or referred to in sub-paragraph (a) to an authorisation under regulation 20 (in whatever terms) were references to an authorisation under this regulation.

(4) On and after 25th December 2003, an authorisation under this regulation shall have effect for the purposes of these Regulations as an authorisation under regulation 20.

### Revocation of Regulations and savings

**39.**—(1) On 25th December 2003—

- (a) the 1990 Regulations;
- (b) the Water Supply (Water Quality) (Scotland) Amendment Regulations 1991 <sup>M17</sup>;
- (c) regulation 23(b) of the Private Water Supplies (Scotland) Regulations 1992 <sup>M18</sup>;
- (d) regulation 16(1) of the Surface Waters (Abstraction for Drinking Water) (Classification) (Scotland) Regulations 1996 <sup>M19</sup>; and
- (e) regulations 36 to 38 of, and Schedules 5 and 6 to, these Regulations,

shall be revoked.

(2) Nothing in paragraph (1) shall affect any obligation of a water authority under the 1990 Regulations to compile and retain records, make information available and produce reports in respect of years ending on or before 31st December 2003.

#### Marginal Citations

**M17** S.I. 1991/1333.

**M18** S.I. 1992/575, amended by S.I. 1998/1856.

**M19** S.I. 1996/3047.

St Andrew's House, Edinburgh  
4th June 2001

*RHONA BRANKIN*  
Authorised to sign by the Scottish Ministers

## 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 {s001} and water treatment works
2.	<i>Escherichia coli</i> ( <i>E coli</i> )	0	number/100ml	service reservoirs and water treatment works

Note:

{s001} compliance required as to 95% of samples from each service reservoir (regulation 4(6))

## 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	{s002}
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

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6.	Boron	1.0	mgB/l	consumers' taps
7.	Bromate	10	µgBrO <sub>3</sub> /l	consumers' taps
8.	Cadmium	5.0	µgCd/l	consumers' taps
9.	Chromium	50	µgCr/l	consumers' taps
10.	Copper {s003}	2.0	mg Cu/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	{s002}
14.	Fluoride	1.5	mg F/l	consumers' taps
15.	Lead {s003}	(a) 25, from 25/12/03 until 24/12/13	µgPb/l	consumers' taps
		(b) 10, from 25/12/13	µgPb/l	consumers' taps
16.	Mercury	1.0	µgHg/l	consumers' taps
17.	Nickel {s003}	20	µgNi/l	consumers' taps
18.	Nitrate {s004}	50	mgNO <sub>3</sub> /l	consumers' taps
19.	Nitrite {s004}	0.50	mgNO <sub>2</sub> /l	consumers' taps
		0.10	mgNO <sub>2</sub> /l	treatment works
20.	Pesticides {s005} {s006} –			
	Aldrin	0.030	µg/l	consumers' taps
	Dieldrin	0.030	µg/l	consumers' taps
	Heptachlor	0.030	µg/l	consumers' taps
	Heptachlor epoxide	0.030	µg/l	consumers' taps
	other pesticides	0.030	µg/l	consumers' taps
21.	Pesticides: Total {s007}	0.50	µg/l	consumers' taps
22.	PAH {s008}	0.10	µg/l	consumers' taps
23.	Selenium	10	µgSe/l	consumers' taps
24.	Tetrachloroethene & Trichloroethene {s009}	10	µg/l	consumers' taps
25.	THM: Total {s010}	100	µg/l	consumers' taps

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26.	Vinyl chloride	0.50	µg/l	{s002}
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Notes:

{s002} 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.

{s003} See also regulation 6(6).

{s004} See also regulation 4(2)(d).

{s005} See the definition of "pesticides and related products" in regulation 2.

{s006} The parametric value applies to each individual pesticide.

{s007} Pesticides: Total means the sum of the concentrations of the individual pesticides detected and quantified in the monitoring procedure.

{s008} PAH means Polycyclic Aromatic Hydrocarbons, the specified compounds are:

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.

{s009} The parametric value applies to the sum of the concentrations of the individual compounds detected and quantified in the monitoring process.

{s010} "THM: Total" means total Trihalomethanes, 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	µg Al/l	consumers' taps
2.	Colour	20	mg/l Pt/Co	consumers' taps

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3.	Hydrogen ion	9.5 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.	Tetrachloromethane <sup>3</sup>		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>Concentration or Value (maximum) or State</i>	<i>Units of Measurement</i>	<i>Point of monitoring</i>
1.	Ammonium	0.50	mgNH <sub>4</sub> /l	consumers' taps
2.	Chloride {s011}	250	mgCl/l	supply point {s013}
3.	<i>Clostridium perfringens</i> (including spores)	0	Number/100 ml	supply point {s013}
4.	Coliform bacteria	0	Number/100ml	consumers' taps
5.	Colony count	No abnormal change	Number/1 ml at 22°C Number/1 ml at 37°C	consumers' taps service reservoirs and treatment works
6.	Conductivity {s011}	2500	µS/cm at 20°C	supply point {s013}
7.	Sulphate {s011}	250	mgSO <sub>4</sub> /l	supply point {s013}

*Notes:*

{s011} The water should not be aggressive.

{s012} Excluding tritium, potassium – 40, radon and radon decay products.

{s013} May be monitored from samples of water leaving treatment works or other supply point, as no significant change during distribution.

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8.	Total indicative dose (for radioactivity) {s012}	0.10	mSv/year	supply point {s013}
9.	Total organic carbon (TOC)	No abnormal change	mgC/l	supply point {s013}
10.	Tritium (for radioactivity)	100	Bq/l	supply point {s013}
11.	Turbidity	1	NTU	treatment works

Notes:

{s011} The water should not be aggressive.

{s012} Excluding tritium, potassium – 40, radon and radon decay products.

{s013} May be monitored from samples of water leaving treatment works or other supply point, as no significant change during distribution.

### SCHEDULE 3

Part IV

### MONITORING

**TABLE 1**  
**PARAMETERS AND CIRCUMSTANCES FOR CHECK MONITORING**

<b>(1)</b> <b>Item</b>	<b>(2)</b> <b>Parameter</b>	<b>(3)</b> <b>Circumstances</b>
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	

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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**

<b>(1)</b> <b>Substances and parameters subject to check monitoring</b>	<b>(2)</b> <b>Estimated population of water supply zone</b>	<b>(3)</b> <b>Reduced</b>	<b>(4)</b> <b>Standard</b>
<i>E.Coli</i>	<100		4
Coliform bacteria	.100		12 per 5000 population {s016}
Residual disinfectant			
Aluminium {s015}			
Ammonium			
<i>Clostridium perfringes</i> (including spores) {s015} {s016}			
Colony counts	<100	1	2

Notes:

{s014} See regulation 6(2) and Table 1 in Schedule 3.

{s015} 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.

{s016} Where the population is not an exact multiple of 5000, the population figure should be rounded up to the nearest multiple of 5000.

{s017} 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.

{s018} To monitor for total indicative dose (for radioactivity).

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Colour	100 – 4,999	2	4
Conductivity {s015}	5,000 – 9,999	6	12
Hydrogen ion	10,000 – 29,999	12	24
Iron {s014}	30,000 – 49,999	18	36
Manganese {s014}	50,000 – 79,999	26	52
Nitrate {s014}	80,000 – 100,000	38	76
Nitrite {s014}			
Odour			
Taste			
Turbidity			
<i>Parameters subject to audit monitoring</i>			
Antimony			
Arsenic			
Benzene {s015}			
Benzo(a)pyrene			
Boron {s015}			
Bromate {s017}			
{s015}			
Cadmium			
Chromium	<100		1
Copper	100 – 4,999		4
Cyanide {s015}	5,000 – 100,000		8
1, 2 dichloroethane {s015}			
Enterococci			
Flouride {s015}			
Lead			

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*Notes:*

{s014} See regulation 6(2) and Table 1 in Schedule 3.

{s015} 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.

{s016} Where the population is not an exact multiple of 5000, the population figure should be rounded up to the nearest multiple of 5000.

{s017} 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.

{s018} To monitor for total indicative dose (for radioactivity).

---

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Mercury {s015}		
Nickel		
Pesticides {s015}		
PAH		
Selenium		
Sodium		
Trichloroethene/ Tetrachloroethene {s015}		
Tetrachloromethane {s015}	<100	1
THM	100 – 4,999	4
Chloride {s015}	5,000 – 100,000	8
Sulphate {s015}		
Total Organic Carbon {s015}		
Tritium {s015}		
Gross alpha {s018} {s015}		
Gross beta {s018} {s015}		

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Notes:

{s014} See regulation 6(2) and Table 1 in Schedule 3.

{s015} 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.

{s016} Where the population is not an exact multiple of 5000, the population figure should be rounded up to the nearest multiple of 5000.

{s017} 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.

{s018} To monitor for total indicative dose (for radioactivity).

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**TABLE 3**  
**ANNUAL SAMPLING FREQUENCIES: SUPPLY POINTS**

<b>(1)</b> <b>Item</b>	<b>(2)</b> <b>Substances and parameters subject to check monitoring</b>	<b>(3)</b> <b>Volume of water supplied m<sup>3</sup>/d</b>	<b>(4)</b> <b>Reduced</b>	<b>(5)</b> <b>Standard</b>
1.	<i>Clostridium perfringens</i> (including spores) {s019}	<20		2
		20 – 999	2	4
2.	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
		120,000 – 241,999	365	730
		242,000 – 484,999	730	1,460
		485,000 – 728,999	1,095	2,190
	<i>Parameters subject to audit monitoring</i>			
3.	Benzene			

*Notes:*

{s019} Check monitoring is required only in respect of surface waters (see regulation 6(2) and Table 1 in Schedule 3), otherwise audit monitoring.

{s020} Audit monitoring at supply points is permitted 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.

{s021} To monitor for total indicative dose (for radioactivity).

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4.	Boron		
5.	Bromate {s020}		
6.	Cyanide		
7.	1,2 dichloroethane		
8.	Fluoride	<20	1
9.	Mercury	20 – 999	4
10.	Pesticides	1,000 – 49,999	8
11.	Trichloroethene/ Tetrachloroethene	50,000 – 89,999	12
		90,000 – 299,999	24
12.	Tetrachloromethane	300,000 – 649,999	36
13.	Chloride	.650,000	48
14.	Sulphate		
15.	Total organic carbon		
16.	Tritium		
17.	Gross alpha {s021}		
18.	Gross beta {s021}		

Notes:

{s019} Check monitoring is required only in respect of surface waters (see regulation 6(2) and Table 1 in Schedule 3), otherwise audit monitoring.

{s020} Audit monitoring at supply points is permitted 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.

{s021} To monitor for total indicative dose (for radioactivity).

**TABLE 4**  
**ANNUAL SAMPLING FREQUENCIES: WATER TREATMENT WORKS**

<b>(1)</b> <b>Item</b>	<b>(2)</b> <b>Substances and parameters subject to check monitoring</b>	<b>(3)</b> <b>Volume of water supplied m3/d</b>	<b>(4)</b> <b>Reduced</b>	<b>(5)</b> <b>Standard</b>
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Notes:

{s022} check monitoring at treatment works is required only when chloramination is practised. In other circumstances, audit monitoring is required.

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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.	Residual disinfectant	6,000 – 11,999	104	208
		.12,000	104	365
5.	Nitrite {s022}	<20		2
6.	Turbidity	20 – 999	2	4
		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
		120,000 – 241,999	365	730
		242,000 – 484,999	730	1,460
		485,000 – 728,999	1,095	2,190
	<i>Substances and parameters subject to audit monitoring</i>			
7.	Nitrite {s022}	<20		1
		20 – 999		4
		1,000 – 49,999		8
		50,000 – 89,999		12
		90,000 – 299,999		24
		300,000 – 649,999		36

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*Notes:*

{s022} check monitoring at treatment works is required only when chloramination is practised. In other circumstances, audit monitoring is required.

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650,000

48

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Notes:

{s022} check monitoring at treatment works is required only when chloramination is practised. In other circumstances, audit monitoring is required.

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## SCHEDULE 4

Regulation 16

## ANALYTICAL METHODOLOGY

## TABLE A1

Parameters for which, subject to regulation 16(5), methods of analysis are prescribed

<b>(1)</b> <b>Parameter</b>	<b>(2)</b> <b>Method</b>
<i>Clostridium perfringens</i> (including spores)	Membrane filtration followed by anaerobic incubation of the membrane on m-CP agar {s023} at 44+1°C for 21+ 3 hours. Count opaque yellow colonies that turn pink or
{s023} The composition of m-CP agar is:	
Basal medium	
Tryptose 30.0g	
Yeast extract 20.0g	
Sucrose 5.0g	
L-cysteine 1.0g	
MgSO <sub>4</sub> • 7H <sub>2</sub> 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-β-D-glucoside to be dissolved in 8ml sterile water before addition 60.0mg	
Filter – sterilised 0.5% phenolphthalein disphosphate solution 20.0ml	
Filter – sterilised 4.5% FeCl <sub>3</sub> • 6H <sub>2</sub> O 2.0ml	

	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	pr EN 6222
Enterocci	ISO 7899-2
<i>Escherichia coli</i> ( <i>E. coli</i> )	ISO 9308-1

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{s023} The composition of m-CP agar is:

Basal medium

Tryptose 30.0g

Yeast extract 20.0g

Sucrose 5.0g

L-cysteine 1.0g

MgSO<sub>4</sub>• 7H<sub>2</sub>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-•-D-glucoside to be dissolved in 8ml sterile water before addition 60.0mg

Filter – sterilised 0.5% phenolphthalein disphosphate solution 20.0ml

Filter – sterilised 4.5% FeCl<sub>3</sub>• 6H<sub>2</sub>O 2.0ml

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TABLE A2

Parameters in relation to which methods of analysis must satisfy prescribed characteristics

<b>(1)</b> <b>Parameters</b>	<b>(2)</b> <b>Trueness % of prescribed concentration or value or specification</b>	<b>(3)</b> <b>Precision % of prescribed concentration or value or specification</b>	<b>(4)</b> <b>Limit of detection % of prescribed concentration or value or specification</b>
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 {s024}	10	10	10
1,2-dichloroethane	25	25	10
Fluoride	10	10	10
Iron	10	10	10
Lead	10	10	10

Notes:

{s024} The method of analysis should determine total cyanide in all forms.

{s025} The performance characteristics apply to each individual pesticide and will depend on the pesticide concerned.

{s026} The performance characteristics apply to the individual substances specified at 25% of the parametric value in Part I of Table B in Schedule 1.

{s027} The performance characteristics apply to the individual substances specified at 50% of the parametric value in Part I of Table B in Schedule 1.

{s028} The performance characteristics apply to the prescribed value of 4NTU.

{s029} The performance characteristics apply to the specification of 1NTU for water leaving treatment works.

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Manganese	10	10	10
Mercury	20	10	20
Nickel	10	10	10
Nitrate	10	10	10
Nitrite	10	10	10
Pesticides and related products {s025}	25	25	25
Polycyclic aromatic hydrocarbons {s026}	25	25	25
Selenium	10	10	10
Sodium	10	10	10
Sulphate	10	10	10
Tetrachloroethene {s027}	25	25	10
Tetrachloromethane	20	20	20
Trichloroethene {s027}	25	25	10
Trihalomethanes: Total {s026}	25	25	10
Turbidity {s028}	10	10	10
Turbidity {s029}	25	25	25

*Notes:*

{s024} The method of analysis should determine total cyanide in all forms.

{s025} The performance characteristics apply to each individual pesticide and will depend on the pesticide concerned.

{s026} The performance characteristics apply to the individual substances specified at 25% of the parametric value in Part I of Table B in Schedule 1.

{s027} The performance characteristics apply to the individual substances specified at 50% of the parametric value in Part I of Table B in Schedule 1.

{s028} The performance characteristics apply to the prescribed value of 4NTU.

{s029} The performance characteristics apply to the specification of 1NTU for water leaving treatment works.

SCHEDULE 5

Regulation 36

AMENDMENT OF THE WATER SUPPLY (WATER QUALITY) (SCOTLAND) REGULATIONS 1990

The amendments to the 1990 Regulations referred to in regulation 36 are—

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

**“ Frequency of sampling for particular organisms and substances**

**13A.**—(1) In each of the years 2001, 2002 and 2003 a water authority 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 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 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 as applicable to a population within that range.

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

- (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 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 to be calculated as twice the standard deviation (within a batch and between batches) of the spread of result about the mean; and

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“trueness” (the systematic error) is to be calculated as the difference between the mean value of a large number of repeated measurements and the true value.”;

and

(e) the insertion, after Table 4 in Schedule 2, of the following Tables:

**“TABLE 4A**

**SAMPLING FOR PARTICULAR ORGANISMS AND SUBSTANCES**

<i>(1)</i> <b>Organism or substance</b>	<i>(2)</i> <b>Concentration or value and unit of measurement</b>	<i>(3)</i> <b>Volume of water supplied m<sup>3</sup>/d</b>	<i>(4)</i> <b>Annual sampling frequency</b>	<i>(5)</i> <b>Estimated population of water supply zone</b>	<i>(6)</i> <b>Annual sampling frequency</b>
Benzene	1.0µg/l				
Bromate	10µgBrO <sub>3</sub> /l				
<i>Clostridium</i> <i>perfringens</i> {s030} (including spores)	0 Number/100ml	• 999	2	• 4,999	2
		1,000 – 49,999	4	5,000–	4
		. 50,000	8	50,000	
1,2 dichloroethane	3.0µg/l				
Enterococci	0 Number/100ml				
Nitrite	0.1 mgNO <sub>2</sub> /l				

{s030} 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 THE PRESCRIBED CHARACTERISTICS**

<i>(1)</i> <b>Parameter or other substance</b>	<i>(2)</i> <b>Concentration and unit of measurement</b>	<i>(3)</i> <b>Trueness % of concentration</b>	<i>(4)</i> <b>Precision % of concentration</b>	<i>(5)</i> <b>Limit of detection % of concentration</b>
Antimony	5.0µgSb/l	25	25	25

{s031} Polycyclic Aromatic Hydrocarbons (PAH), sum of the concentrations of benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)pyrene, and indeno(1,2,3-cd)pyrene. The performance characteristics apply to the individual substances specified at 25% of the concentration in column (2).

{s032} The performance characteristics apply to the individual substances specified at 50% of the concentration in column (2).

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Arsenic	10µgAs/l	10	10	10
Benzene	1.0µg/l	25	25	25
Boron	1.0 mgB/l	10	10	10
Bromate	10µgBrO3/l	25	25	25
Copper	2.0 mgCu/l	10	10	10
1, 2 dichloroethane	3.0µg/l	25	25	10
Lead	25µgPb/l	10	10	10
Nickel	20µgNi/l	10	10	10
Nitrite (ex-works)	0.1 mgNO2/l	10	10	10
PAH {s031}	0.1µg/l	25	25	25
Tetrachloroethene {s032}	10µg/l	25	25	10
Trichloroethene {s032}	10µg/l	25	25	10 <sup>2</sup>

{s031} Polycyclic Aromatic Hydrocarbons (PAH), sum of the concentrations of benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)pyrene, and indeno(1,2,3-cd)pyrene. The performance characteristics apply to the individual substances specified at 25% of the concentration in column (2).

{s032} The performance characteristics apply to the individual substances specified at 50% of the concentration in column (2).

## SCHEDULE 6

Regulation 37

### PROGRAMMES OF WORK

A water authority'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 38(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  $\frac{[\text{nitrate}]}{50} + \frac{[\text{nitrite}]}{3} \leq 1$ , where the square brackets signify the concentrations in mg/l for nitrate (NO<sub>3</sub>) and nitrite (NO<sub>2</sub>) is unlikely to be satisfied;
- (c) specify the steps that the water authority intends to take for the purpose of securing that the requirements of regulation 38(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 Scottish Ministers in relation to the taking and completion of the steps specified in accordance with paragraph (c).

## TABLE

---

<i>E. coli</i>
Enterococci
Acrylamide
Antimony
Arsenic
Benzene
Benzo(a)pyrene
Boron
Bromate
Cadmium
Chromium
Copper
Cyanide
1,2-dichloroethane
Epichlorohydrin
Lead
Mercury
Nickel
Nitrate
Nitrite
Pesticides
Polycyclic aromatic hydrocarbons
Selenium
Tetrachloroethene/Trichloroethene (sum of concentrations)
Trihalomethanes – Total (sum of concentrations of chloroform, bromoform, dibromochloromethane and bromodichloromethane)
Vinyl chloride

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## EXPLANATORY NOTE

*(This note is not part of the Regulations)*

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These Regulations supplement Part VIA of the Water (Scotland) Act 1980 (“the 1980 Act”); amend, for a limited period, the Water Supply (Water Quality) (Scotland) Regulations 1990 (“the 1990 Regulations”) and, on 25th December 2003, revoke and replace those Regulations. They are primarily concerned with the quality of water supplied in Scotland for drinking, washing, cooking and food preparation, and for food production, and with arrangements for the publication of information about water quality.

The Regulations are directed at the achievement of the objective set out in Article 2 of Council Directive 98/83/EC (O.J. No. L 330, 5.12.98, p.32) (“the 1998 Directive”), namely, to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean. In particular, effect is given in Part III of the Regulations to Articles 4 and 5 of the 1998 Directive which relate to the quality of water intended for human consumption and, in Part V, to Article 7 (monitoring) of that Directive. Subject to the exceptions mentioned below, the Regulations come into force on 25th December 2003. Regulations 1 and 2 (which deal with commencement, extent and interpretation), regulation 36 (which introduces the amendments to the 1990 Regulations set out in Schedule 5) and regulation 37 (a transitional provision requiring the submission of programmes of work) come into force on 21st June 2001.

Regulation 3 (which deals with water supply zones) and regulation 38 (a transitional provision enabling applications to be made for authorisations) come into force on 1st June 2003.

Regulation 4 (which prescribes new standards of wholesomeness), regulations 17 to 24 (which deal with sampling) paragraphs (4) and (5) of regulation 26 (which deals with lead pipes) and paragraph (1) of regulation 39 (which revokes provisions of the 1990 Regulations superseded by regulations 4 and 17 to 24) come into force on 25th December 2003, when the 1998 Directive takes effect.

Part I of the Regulations (regulations 1 and 2) defines terms that are used in the Regulations.

Part II (regulation 3) requires water authorities to identify annually the areas (“water supply zones”) that are to be relevant for a particular year for the purposes of the application of the provisions of the Regulations. A water supply zone may not comprise an area in which the estimated population exceeds 100,000. Water authorities may not alter the boundaries of water supply zones during the year.

Part III (regulation 4) prescribes standards of wholesomeness in respect of water that is supplied by water authorities for cooking, drinking, food preparation and washing and other domestic purposes and to premises for food production purposes. These various purposes are referred to in the Regulations as “regulation 4(1) purposes”. In particular, regulation 4 provides that water is to be regarded as wholesome if it contains concentrations or values in respect of various properties, elements, organisms and substances that do not contravene prescribed maximum and, in some cases, minimum concentrations or values. Some of the prescribed maximum and minimum concentrations and values are specified in regulation 4, but most are included in Tables A and B which appear in Schedule 1. They include the values specified in Part A and B of Annex 1 to the 1998 Directive. There are also specifications for indicator parameters in Schedule 2.

Part IV (regulations 5 to 10) provides for the monitoring of water supplies by reference to the analysis of samples. Regulation 5 defines two monitoring regimes; “audit” monitoring and “check” monitoring. Regulation 6 requires water authorities to take a minimum number of samples each year in respect of a variety of properties, elements, organisms and substances. It also makes special provision for monitoring supplies from tankers. Regulation 7 requires water authorities to select at random the consumers’ taps from which samples are to be taken. Regulation 8 authorises the taking of samples from points other than consumers’ taps (“supply points”) and allows the Scottish Ministers to authorise other supply points. Regulation 9 deals with the number of samples to be taken. These are specified in Tables 1 and 2 in Schedule 3 to the Regulations, and are not less than those specified in Annex II to the 1998 Directive. Regulation 10 requires samples to be taken where water authorities have reason to believe that the quality of the water within their water supply zone has been adversely affected by the presence of certain elements, organisms or substances.

Part V (regulations 11 to 16) contains additional provisions relating to sampling. Regulations 13 and 14 require samples to be taken in respect of particular organisms and substances, at treatment works and at reservoirs which store treated water. Regulation 15 requires samples to be taken before water is supplied from new sources and from sources which have not recently been used. Regulation 16 prescribes requirements relating to the taking, handling, storage, transport and analysis of samples.

Part VI (regulations 17 to 24) provides for the investigation of every failure to satisfy a concentration, value or state prescribed by regulation 4 and for a report to be made to the Scottish Ministers. Where a failure relates to a Table B parameter, and certain other conditions are met, the Scottish Ministers may require the water authority to apply to them for an authorisation allowing a departure from the requirements of Part III, as regards that parameter. The circumstances in which such authorisations may be issued, and the conditions to which they are subject are contained in regulations 21 and 22, respectively. (Article 9 of the 1998 Directive permits derogations from the parametric values). Provision is made in regulation 23 for publicising authorisations. Regulation 24 provides for the modification and withdrawal of authorisations.

Part VII (regulations 25 to 29) deals with the treatment of water and regulates the substances, processes and products that may be used by water authorities in connection with the supply of water. Regulation 25 imposes requirements relating to the disinfection of water and imposes additional requirements for the treatment of surface water. It prohibits the abstraction for the supply of drinking water of waters below category A3, as required by Council Directive [75/440/EEC](#) (quality required of surface water intended for the abstraction of drinking water). Regulation 26 makes provision for securing the elimination or reduction to a minimum of the risk that water will be contaminated after supply by excessive concentrations of copper or lead. Regulation 27 specified the circumstances in which water authorities may apply or introduce substances or products into water supplied for drinking, washing or cooking. Regulation 28 enables the Scottish Ministers to require that their approval be obtained to the use of processes. Contravention of some of the requirements of regulations 27 and 28 is made a criminal offence by regulation 29, as is the making of false statements.

Part VIII deals with the provision of information by water authorities. Regulation 30 requires water authorities to prepare and maintain records containing information about the quality of water supplied in their water supply zones. Regulation 31 requires each water authority to make available for public inspection, and to supply local authorities with, information about the quality of water within its water supply zones, the extent to which Part IV of the Regulations has been complied with, details of any departures authorised under Part VI of the Regulations and of the action which has been taken to comply with default orders under section 76E of the 1980 Act. It also requires each water authority to provide local authorities, health authorities and the Water Industry Commissioner for Scotland with information relating to matters that could give rise to significant risk to public health. Regulation 32 requires water authorities to publish an annual report containing information about the quality of water in the area for which it is responsible.

Part IX (regulations 33 and 34) imposes requirements on local authorities in the performance of their duties in relation to the quality of water supplied by water authorities. Regulation 34 provides for the making of arrangements between the local authorities and the water authorities about the provision of information. It also enables local authorities to take such samples of water as they may reasonably require.

Part X (regulation 35) provides that contraventions by water authorities of duties or requirements imposed by Parts V to VIII of the Regulations are to be enforceable under section 76E of the 1980 Act by the Scottish Ministers. This provision is additional to the criminal sanctions provided by regulation 29 in relation to contraventions of regulations 27 and 28.

Part XI (regulations 36 to 39) amends the 1990 Regulations, makes transitional provision and revokes the 1990 Regulations and other related provisions subject to savings. The amendments to the 1990 Regulations, which take effect on 26th June 2001, are set out in Schedule 5 (Regulation 36). Regulation 37 requires water authorities to submit for the Scottish Ministers' approval programmes of work designed to secure that the standards of wholesomeness prescribed in Part

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III of the Regulations will, so far as reasonably practicable, be achieved when that Part comes into force on 25th December 2003. Programmes of work are to be prepared in accordance with Schedule 6 and are to be submitted to the Scottish Ministers before 25th September 2001. They may be approved by the Scottish Ministers with or without modification, and may be modified where the Scottish Ministers consider it necessary to do so for the purpose of securing that wholesomeness standards will be met on and after 25th December 2003. If a water authority fails to submit a programme of works, or if the submitted programme fails to meet the requirements of Schedule 6, or is otherwise unacceptable, the Scottish Ministers may prepare one. Programmes of work will be enforceable under section 76E of the 1980 Act by the Scottish Ministers.

Regulation 38 makes further transitional provision to enable water authorities to apply in advance for the Scottish Ministers' authorisation in relation to matters which, on and after 25th December 2003, will need to be authorised under Part VI of the Regulations.

Regulation 39 revokes the 1990 Regulations, and amending regulations. Regulation 23(b) of the Private Water Supplies (Scotland) Regulations 1992 and regulation 16(1) of the Surface Waters (Abstraction for Drinking Water) (Classification) (Scotland) Regulations 1996 are also revoked to the same extent, in consequence of the revocation of the 1990 Regulations. The revocation of the 1990 Regulations does not affect the obligations of water authorities to keep records, provide information, or make reports for the year ending on 31st December 2003.

A regulatory impact assessment in respect of the Regulations may be obtained from the Scottish Executive, Rural Affairs Department, Environment Group, Water Services Unit, Victoria Quay, Edinburgh EH6 6QQ. A copy has been placed in the Scottish Parliament Information Centre. Copies of the ISO standards referred to in Table A1 in Schedule 4 may be obtained from BSI, 389 Chiswick High Road, London W4 4AL.

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**Changes and effects yet to be applied to :**

- Regulations revoked by [S.S.I. 2014/364 reg. 50\(1\)\(b\)](#)
- reg. 2(1) words substituted by [S.S.I. 2003/331 Sch. para. 13](#)
- regs 836 am by [S.S.I. 2001/238 reg 2](#)
- reg. 17(5) word substituted by [S.S.I. 2010/95 reg. 7\(3\)\(a\)](#)
- reg. 17(5) words inserted by [S.S.I. 2010/95 reg. 7\(3\)\(b\)](#)
- reg. 17(5)(c) words omitted by [S.S.I. 2010/95 reg. 7\(3\)\(d\)](#)
- reg. 17(6) words inserted by [S.S.I. 2010/95 reg. 7\(5\)](#)
- reg. 17(7) word inserted by [S.S.I. 2010/95 reg. 7\(6\)\(a\)](#)
- reg. 17(7) words inserted by [S.S.I. 2010/95 reg. 7\(6\)\(b\)](#)
- reg. 18(1) word inserted by [S.S.I. 2010/95 reg. 8\(2\)\(a\)](#)
- reg. 18(1)(c) words omitted by [S.S.I. 2010/95 reg. 8\(2\)\(c\)](#)
- reg. 18(2) word inserted by [S.S.I. 2010/95 reg. 8\(3\)\(a\)](#)
- reg. 18(2) words inserted by [S.S.I. 2010/95 reg. 8\(3\)\(b\)](#)
- reg. 18(2)(a) word omitted by [S.S.I. 2010/95 reg. 8\(3\)\(c\)](#)
- reg. 18(3) words inserted by [S.S.I. 2010/95 reg. 8\(5\)](#)
- reg. 19(4) substituted by [S.S.I. 2010/95 reg. 10](#)
- reg. 20(1)(a) words omitted by [S.S.I. 2010/95 reg. 11](#)
- reg. 21(1) words substituted for word by [S.S.I. 2010/95 reg.012](#)
- reg. 27(1) words omitted by [S.I. 2013/1387 Sch. 5 para. 4\(a\)](#)
- reg. 27(1) words substituted by [S.S.I. 2013/177 Sch. para. 9](#)
- reg. 27(3) words substituted by [S.I. 2013/1387 Sch. 5 para. 4\(b\)\(i\)](#)
- reg. 27(3)(a) omitted by [S.I. 2013/1387 Sch. 5 para. 4\(b\)\(ii\)](#)
- reg 39 rev by [S.S.I. 2006/209 reg 37](#)

**Changes and effects yet to be applied to the whole Instrument associated Parts and Chapters:**

Whole provisions yet to be inserted into this Instrument (including any effects on those provisions):

- reg. 17(2)(aa) inserted by [S.S.I. 2010/95 reg. 7\(2\)](#)
- reg. 17(5)(aa) inserted by [S.S.I. 2010/95 reg. 7\(3\)\(c\)](#)
- reg. 17(5A) inserted by [S.S.I. 2010/95 reg. 7\(4\)](#)
- reg. 18(1)(aa) inserted by [S.S.I. 2010/95 reg. 8\(2\)\(b\)](#)
- reg. 18(2)(c) and word inserted by [S.S.I. 2010/95 reg. 8\(3\)\(e\)](#)
- reg. 18(2)(aa) inserted by [S.S.I. 2010/95 reg. 8\(3\)\(d\)](#)
- reg. 18(2A) inserted by [S.S.I. 2010/95 reg. 8\(4\)](#)
- reg. 18A inserted by [S.S.I. 2010/95 reg. 9](#)
- reg. 25(1A) inserted by [S.S.I. 2010/95 reg. 13](#)
- regs 36–38 Sch 5 Sch 6 rev (25.12.2003) by [S.S.I. 2001/207 reg 39\(1\)\(e\)](#)