

1990 No. 119 (S.11)

WATER SUPPLY, SCOTLAND

**The Water Supply (Water Quality) (Scotland)
Regulations 1990**

<i>Made</i>	<i>23rd January 1990</i>
<i>Laid before Parliament</i>	<i>8th February 1990</i>
<i>Coming into force</i>	
<i>Except for regulations 13, 17, 18, 19 and</i> <i>30</i>	<i>1st May 1990</i>
<i>Regulations 13, 17, 18, 19 and 30</i>	<i>1st July 1990</i>

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The Secretary of State, in exercise of the powers conferred upon him by sections 76A, 76B, 76F, 76J, 101(1) and 109(1) of the Water (Scotland) Act 1980(a), and of all other powers enabling him in that behalf, hereby makes the following Regulations:

PART I GENERAL

Citation and commencement

1.—(1) These Regulations may be cited as the Water Supply (Water Quality) (Scotland) Regulations 1990.

(2) These Regulations shall come into force on 1st May 1990 except regulations 13, 17, 18, 19 and 30 which shall come into force on 1st July 1990.

Interpretation

2. In these Regulations—

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

“consumer” means a person to whom water is supplied for a purpose mentioned in Part II of these Regulations by a water authority in the discharge of its duties under Part II of the Act;

“disinfected” means subjected to a process which removes or renders inactive pathogenic micro-organisms so as to satisfy the requirements of Part II of these Regulations in respect of the parameters listed in Table C; and cognate expressions (with the exception of the term “residual disinfectant”) shall be construed accordingly;

“ground water” shall be construed in accordance with section 30A(1)(d) of the Control of Pollution Act 1974(b);

“parameter” means a property, element, organism or substance listed in the second column of the Tables in Schedule 1 to these Regulations or in the first column of Tables 1 to 4, 6 and 7 in Schedule 2;

“pesticides and related products” means any fungicide, herbicide or insecticide and polychlorinated biphenyls and terphenyls;

“prescribed concentration or value”, in relation to any parameter, means the maximum or minimum concentration or value specified in relation to that parameter in the Tables in Schedule 1 as measured by reference to the unit of measurement so specified;

“sampling point” means the point, being a consumer’s tap, that is determined for the purposes of Part IV of these Regulations;

“service reservoir” means a reservoir (including a water tower) which contains water that has been treated with a view to complying with regulation 23 below, but does not include a reservoir at a treatment works;

“supply point” means any point, not being a sampling point, which the Secretary of State may, in accordance with regulation 12, authorise for the purposes of regulation 10;

(a) 1980 c.45; sections 76A, 76B, 76F and 76J were added by the Water Act 1989 (c.15), Schedule 22, paragraph 1; section 109(1) contains a definition of “prescribed” relevant to the exercise of the statutory powers under which these Regulations are made.

(b) 1974 c.40; section 30A was added by the Water Act 1989, Schedule 23, paragraph 4.

“water supply zone” means an area that is designated by a water authority for the purposes of these Regulations, being an area in which, in the authority’s estimation, not more than 50,000 people reside and in which all the premises supplied with water for domestic purposes by that authority are normally supplied from the same source or combination of sources;

“year” means calendar year;

and any reference to a Table followed by a letter or a number is reference to the Table that bears that letter or number in Schedule 1 or 2 to these Regulations.

PART II WHOLESOMENESS

Wholesomeness

3.—(1) This regulation has effect subject to Part III of these Regulations.

(2) Subject to paragraph (7), water supplied to any premises for such domestic purposes as consist of or include drinking, washing or cooking shall be regarded as wholesome for the purposes of Part VI A of the Act(a), as it applies to the supply of water for those domestic purposes, if the requirements of paragraph (3) below are satisfied; and, where the water has been softened or desalinated and is to be supplied for drinking or cooking, the requirements of paragraph (4) are also satisfied.

(3) The requirements of this paragraph are—

- (a) that the water does not contain any element, organism or substance (other than a parameter) at a concentration or value which would be detrimental to public health;
- (b) that the water does not contain any element, organism or substance (whether or not a parameter) at a concentration or value which in conjunction with any other element, organism or substance it contains (whether or not a parameter) would be detrimental to public health;
- (c) subject to paragraphs (5) and (6) below, that the water does not contain concentrations or values of the parameters listed in Tables A to C in excess of the prescribed concentrations or values;
- (d) that samples taken in respect of the parameters listed in Table D from water supplied to the water supply zone in question have established that the average concentrations or values of those parameters over the preceding 12 months did not exceed those specified in that Table; and
- (e) that samples taken from water supplied to the water supply zone in question have established that the average concentrations over the three preceding months of trihalomethanes (being the aggregate of the concentrations of trichloromethane, dichlorobromomethane, dibromochloromethane and tribromomethane) did not exceed 100 µg/l or where (by virtue of regulation 13(4)) less than four samples are taken in any year, no sample contained a concentration of trihalomethanes in excess of 100 µg/l.

(4) The requirements of this paragraph are that the water’s hardness or its alkalinity is not below the relevant minimum specified in Table E.

(5) Water shall not be regarded as unwholesome by virtue of paragraph (3)(c) above solely by reason of a sodium concentration exceeding that specified in relation to item 9 in Table A (sodium) if 80% of the results of analysis of all the samples taken in accordance with these Regulations within the preceding 36 months from sampling points within the water supply zone in question demonstrate a concentration of sodium within the relevant maximum specified in that Table.

(6) Water shall not be regarded as unwholesome by virtue of paragraph (3)(c) above solely by reason of the presence in it of total coliforms (item 1 of Table C) if 95% of the results of analysis of—

(a) Part VI A was added by the Water Act 1989, Schedule 22, paragraph 1.

(a) if, in the preceding 12 months, 50 or more samples have been taken in accordance with these Regulations in respect of that parameter, every such sample taken in those months; or

(b) in any other case, the last 50 samples so taken, establish the absence of such coliforms.

(7) Water supplied to any premises for such domestic purposes as are mentioned in paragraph (2) shall be regarded as unwholesome for the purposes of Part VI A of the Act if on transfer from a treatment works or service reservoir for supply for such domestic purposes it contained a concentration of any of the parameters listed in Table C in excess of the prescribed concentration.

PART III

RELAXATION OF REQUIREMENTS OF PART II

Authorisations – public supplies

4.—(1) The Secretary of State may, upon the written application of a water authority, authorise a relaxation of the provisions of Part II of these Regulations as respects the supply of water by that authority if he is satisfied—

- (a) that the authorisation is necessary, as an emergency measure, to maintain a supply of water for human consumption;
- (b) that the authorisation is called for by reason of exceptional meteorological conditions; or
- (c) that the authorisation is called for by reason of the nature and structure of the ground in the area from which the supply emanates.

(2) The Secretary of State may, in the circumstances mentioned in paragraph (1)(c), authorise a relaxation of the provisions of Part II of these Regulations as respects the supply of water by a water authority notwithstanding that no application for such authorisation has been made to him.

(3) A water authority shall at the same time as it makes an application for an authorisation under paragraph (1) serve a copy on the district or islands council in whose area is situated any premises in relation to which the authorisation is sought.

Authorisations – restrictions

5.—(1) An authorisation—

- (a) granted under regulation 4(1)(a) shall not so relax the provisions of Part II of these Regulations as to give rise to a risk to public health which the Secretary of State considers unacceptable;
- (b) granted under regulation 4(1)(b) or (c) shall not relax the provisions of the said Part II so far as they relate to parameters mentioned in Table B or C or item 7 of Table D, or so as to give rise to a public health hazard.

(2) An authorisation granted under regulation 4(1) shall specify (where relevant) the extent to which the prescribed concentration or value of any parameter is authorised to be contravened.

(3) An authorisation granted under regulation 4(1)(a) or (b) shall specify the date on which it ceases to have effect and an authorisation under regulation 4(1)(c) or (2) may specify such a date.

Authorisations – limitations and conditions

6.—(1) An authorisation granted under this Part may be limited to water supplied—

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

- (2) An authorisation granted under this Part may include conditions relating to—
- (a) the quality of water to which the authorisation applies;
 - (b) the steps to be taken to improve the quality of such water;
 - (c) the monitoring of the quality of such water; and
 - (d) the giving of notice to the Secretary of State or any person named in the authorisation of such matters concerning such water as are mentioned in the authorisation.

Revocation and modification of authorisations

7.—(1) Subject to paragraphs (2) and (3), the Secretary of State may at any time modify or revoke an authorisation (whether or not the authorisation is expressed to be granted for a specified period); and regulation 6 shall apply as respects the modification of an authorisation as it applies as respects the granting of an authorisation.

(2) The Secretary of State shall not revoke or modify an authorisation without giving at least six months' notice of his intention to do so to—

- (a) the water authority to which the authorisation relates; and
- (b) the district or islands council in whose area is situated any premises in relation to which the authorisation applies;

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

(3) A water authority on whose application an authorisation has been granted under this Part shall notify the Secretary of State as soon as the circumstances which gave rise to the application for the authorisation cease to exist; and, notwithstanding paragraph (2), the Secretary of State shall thereupon revoke the authorisation.

Authorisations – private supplies

8.—(1) Regulations 4, 5, 6(2) and 7 shall apply in relation to any private supply as if—

- (a) in regulation 4(1) there were substituted for the words “the supply of water by that authority” the words “a private supply”;
- (b) for other references to a water authority there were substituted references to—
 - (i) the owner or occupier of the premises where the source of the private supply is situated;
 - (ii) any other person who exercises powers of management or control in relation to that source; or
 - (iii) the owner of any premises served by that supply; and
- (c) where application is made by the owner of premises served by a private supply, there were added at the end of regulation 4(3) the words “and on one of the persons mentioned in regulation 8(1)(b)(i) and (ii)”.

(2) Subject to paragraph (3), the Secretary of State may authorise a district or islands council to exercise in relation to a private supply any power conferred on him by regulations 4, 5, 6(2) and 7; and accordingly, upon such authorisation, those regulations shall apply in relation to private supplies as if references to the Secretary of State were references to the council:

Provided that nothing in this paragraph shall affect the power conferred on the Secretary of State by regulation 7(1) as applied by paragraph (1) above or permit a district or islands council to modify or revoke an authorisation granted by the Secretary of State.

(3) A district or islands council may be authorised under paragraph (2) in relation to a supply only if some or all of the premises served by the supply are within their area; and, where only some of those premises are within their area, only if the powers conferred on them by the authorisation are exercised jointly with, or with the consent of, the other council in whose area the rest of those premises are situated.

PART IV

MONITORING OF WATER SUPPLIES

Application and interpretation

9.—(1) This Part applies to water supplied for any of the purposes described in regulation 3(2) by a water authority.

(2) In this Part—

“corresponding number” means any relevant reduced or increased number shown in a Table as an alternative to the standard number; and

“the standard number” means such number specified in the column headed “Standard” in Tables 1 to 6 as is applicable to the parameter in question by reference to the number of persons estimated to have been supplied from the relevant water supply zone during the year preceding the year in question or, as the water authority may determine, by reference to the volume of water supplied for domestic purposes from that zone during that period; but a determination may not be varied after the beginning of the year for which it applies.

Monitoring – general provisions

10. For the purpose of determining whether water to which this Part applies satisfies the provisions of Part II or, as the case may be, those provisions as relaxed by an authorisation given under Part III, a water authority shall take and analyse or cause to be analysed such number of samples of the water within each of its water supply zones as is specified in this Part.

Determination of sampling points

11.—(1) Subject to paragraph (2), a water authority shall determine, in respect of each of its water supply zones, such number and location of sampling points as will, in its opinion, secure that analysis of samples obtained from those points in respect of the parameters listed in Tables A to E will, so far as is reasonably practicable, produce data which are representative of the quality of the water supplied by it to that zone.

(2) The sampling points selected in respect of copper, lead and zinc and at least 50% of the sampling points selected in respect of parameter 1, 2 and 5 listed in Table C and in respect of residual disinfectant shall be selected at random.

Authorisation of supply points

12.—(1) The Secretary of State may, in relation to any of the parameters listed as items 7 to 12, 18 to 20 and 26 to 28 in Table A, items 1 to 6 and 8 to 10 in Table B, items 1 to 6 and 8 to 10 in Table D, and items 1 and 2 in Table E, or trihalomethanes, upon the written application of a water authority authorise the use for the purposes of regulation 10 of samples taken otherwise than from a sampling point.

(2) The Secretary of State shall grant an authorisation under paragraph (1) only if he is satisfied that analysis of samples taken from a point other than a sampling point will produce data in respect of the parameter in question which are unlikely to differ in any significant respect from the data that would be produced in respect of that parameter from analysis of samples obtained from sampling points.

Frequency of sampling

13.—(1) Subject to paragraphs (2) to (9), in each year a water authority shall take from its sampling points, or, as the case may be, its supply points, for analysis for testing for compliance with each parameter not less than such standard number of samples as is specified in Tables 1 to 6 in relation to the parameter in question.

(2) In the period from 1st July 1990 to 31st December 1990, the number of samples taken shall be not less than one-half of the standard number of samples so specified, which number shall be rounded upwards, if necessary, to the nearest whole number.

(3) For the purposes of the application of paragraphs (1) and (2) to the parameters listed in Table 1 or 2 or referred to in Table 5, a supply which consists of both ground water and surface water shall be deemed to be a supply which consists only of surface water.

(4) Where in each of three successive years the requirement mentioned in paragraph (5) below is satisfied in relation to a parameter listed in Table 1, 2 or 3 or referred to in Table 5 and the water authority is of the opinion that the concentration or value in respect of that parameter is unlikely to increase or, in the case of hydrogen ion, total hardness or alkalinity, decrease to any significant extent in the next following year, the number of samples to be taken in that year in respect of that parameter may be the reduced corresponding number:

Provided that this paragraph shall apply in order to determine the number of samples to be taken in 1991, 1992 and 1993 with the modifications specified in paragraph (6) below.

(5) The requirement referred to in paragraph (4) above is that analysis of each sample taken in relation to the parameter in question in accordance with paragraph (1) or (2), as the case may be, has established—

- (a) in the case of hydrogen ion, a pH value that is no less than 6.5 and no more than 8.5;
- (b) in the case of total hardness or alkalinity (where water has been softened or desalinated), a concentration that is no less than 90mg Ca/l or 45mg HCO₃/l, respectively; or
- (c) in any other case, a concentration or value which is less than 50% of the prescribed concentration or value.

(6) Paragraph (4) shall apply in order to determine the number of samples to be taken—

- (a) in 1991 as if it referred to the period from 1st July 1990 to 31st December 1990 instead of three successive years;
- (b) in 1992 as if it referred to the period from 1st July 1990 to 31st December 1991 instead of three successive years;
- (c) in 1993 as if it referred to the period from 1st July 1990 to 31st December 1992 instead of three successive years; and
- (d) in each of these years with the substitution of “and the Secretary of State has notified the authority that he” for “and the water authority”.

(7) Where—

- (a) the result of the analysis of any sample taken in accordance with paragraph (1) or (2), as the case may be, has established in relation to any parameter listed in Tables 1 to 5 that the prescribed concentration or value has been contravened; or
- (b) as a consequence of any change in a water authority's practices as regards the treatment of water (whether at a service reservoir, treatment works or otherwise), the authority is of the opinion that the prescribed concentration or value in respect of any parameter has been or may be contravened,

the number of samples to be taken in respect of that parameter—

- (i) in the remainder of that year and the following year; or
- (ii) in such longer or shorter period as the Secretary of State may specify by notice in writing given to the water authority,

shall, where an increased corresponding number is shown in relation to that parameter, be the number determined in accordance with paragraph (8).

(8) The number determined for the purposes of paragraph (7) is—

- (a) for any whole year in the period the increased corresponding number; or
- (b) for any other part of the period the increased corresponding number multiplied by the number of whole months in that part and divided by 12; and, where the result is not a whole number, rounded upwards to the nearest whole number.

(9) Where an analysis of samples taken in accordance with paragraph (7) demonstrates that there has been no contravention of the prescribed concentration or value in the relevant period, the authority may revert to sampling in accordance with paragraph (1).

Sampling – further provisions

14.—(1) Where no standard number is specified in relation to a parameter listed in Schedule 1, a water authority shall take samples from water within a water supply zone in respect of that parameter as soon as it believes or has reasonable grounds for believing that—

- (a) the prescribed concentration or value in respect of that parameter has been exceeded or may be exceeded within the next three months within that zone; or
- (b) the prescribed concentration or value in respect of any other parameter has been exceeded or may be exceeded within the next three months within that zone; and the taking and analysis of samples in relation to the parameter first mentioned would assist in deciding whether, and, if so, what, remedial action should be taken.

(2) A water authority shall take samples from water within a water supply zone in respect of any element, organism or substance, other than a parameter, as soon as it believes or has reasonable grounds for believing that that element, organism or substance, whether alone or in combination with a parameter or any other element, organism or substance, may cause the supply within that zone to be a supply which does not satisfy the provisions of Part II of these Regulations or, where those provisions have been relaxed by an authorisation given under Part III, those provisions as so relaxed.

PART V

MONITORING – ADDITIONAL PROVISIONS

Interpretation

15. In this Part—

“the standard number” means such number specified in the column headed “Standard” in Table 7 as is applicable to the parameter in question by reference to the volume of water supplied for domestic purposes from the relevant water supply zone during the preceding year; and

“reduced number” means the relevant reduced number (if any) shown in Table 7.

Sampling for particular parameters

16. For the purpose of establishing the quality of water to be supplied to any of its water supply zones, a water authority shall take and analyse or cause to be analysed, such number of samples as is specified in this Part.

Sampling at treatment works

17.—(1) Subject to paragraphs (2) to (4), in each year a water authority shall take from the point at which water leaves each treatment works which serves its water supply zones for analysis for testing for compliance with the parameters mentioned in Table 7 not less than the standard number of samples.

(2) In the period from 1st July 1990 to 31st December 1990, the number of samples taken shall be not less than one-half of the standard number, which number shall be rounded upwards, if necessary, to the nearest whole number.

(3) Where in each of three successive years the result of the analysis of the samples taken in accordance with paragraph (1) has established an absence of faecal and total coliforms and no significant increase in colony counts, the number of samples to be taken in the next following year from the point at which water leaves that works in respect of those parameters or that parameter, as the case may be, may, subject to paragraph (5), be the reduced number:

Provided that this paragraph shall apply in order to determine the number of samples to be taken in 1991, 1992 and 1993 with the modifications specified in paragraph (4) below.

(4) Paragraph (3) shall apply in order to determine the number of samples to be taken—

- (a) in 1991 as if it referred to the period from 1st July 1990 to 31st December 1990 instead of three successive years;
- (b) in 1992 as if it referred to the period from 1st July 1990 to 31st December 1991 instead of three successive years;
- (c) in 1993 as if it referred to the period from 1st July 1990 to 31st December 1992 instead of three successive years; and

(d) in each of these years with the substitution of "paragraphs (1) and (2)" for "paragraph (1)".

(5) A reduced number of samples may be taken in accordance with paragraph (3) in respect of works supplying for domestic purposes an average volume of more than 2,000m³/d of water only if the water authority is of the opinion that there is no foreseeable risk that faecal or total coliforms will be present in the supply or the works are so designed that a failure of the disinfection process will bring about automatically a cessation of the supply.

Sampling at service reservoirs

18. A water authority shall take from each of its service reservoirs at least one sample for analysis for testing for compliance with each of the parameters listed in Table 7 in each week in which the reservoir is in use.

Sampling – additional samples

19.—(1) If, as a consequence of any change in a water authority's practices in treating water at a treatment works or service reservoir, the authority is of the opinion that the prescribed concentration or value in respect of any parameter mentioned in Tables 1 to 5 has been or may be contravened, it shall until the end of the next following year (or for such other period as the Secretary of State may notify to the authority in writing) take for analysis for testing for compliance with that parameter the number of samples specified in paragraph (2).

(2) The number of samples to be taken is—

- (a) for any whole year in the period, the increased corresponding number specified in the relevant Table for that parameter or (where none is specified) the standard number;
- (b) for any other part of the period, the appropriate increased corresponding number multiplied by the number of whole months in that part and divided by 12; and, where the result is not a whole number, rounded upwards to the nearest whole number.

(3) Where an analysis of samples taken in accordance with paragraph (1) demonstrates that there has been no contravention of the prescribed concentration or value in the relevant period, the authority may revert to sampling in accordance with regulation 13(1).

Sampling – new and stand-by sources

20.—(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 15th July 1985; 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 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(1) 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) each of the parameters listed in Schedule 1; and
 - (ii) any other element, organism or substance which, in the opinion of the authority, may cause the supply to contravene section 76A(1); or
- (b) in the case of a source mentioned in paragraph (1)(b), in respect of —
 - (i) the parameters listed in Table C;
 - (ii) any parameter by reference to which an assessment may be made of the balance of ions within the water; and

- (iii) any other parameter whose concentration or value may, in the opinion of the water authority, have altered since the last occasion on which water from that source was analysed.

Collection and analysis of samples

21.—(1) A water authority shall secure, so far as is reasonably practicable, that in taking, handling, transporting, storing and analysing or causing to be analysed any sample taken for the purposes of Parts IV and V of these Regulations, 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 for the measurement or observation of 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;
 - (ii) with the use of such equipment as is suitable for the purpose;
 - (iii) by applying such analytical systems and methods as are capable of establishing, within acceptable limits of deviation and detection, whether the sample contains concentrations or values which contravene the prescribed concentrations or values; and
- (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 authority; and
 - (ii) approved by the Secretary of State for that purpose.

PART VI WATER TREATMENT

Interpretation

22. In this Part—

“pipe” does not include any tap, cock, valve, ferrule, meter, cistern or similar apparatus used in connection with the supply and use of water; and

“surface water” does not include water from a spring.

Treatment of raw water

23.—(1) In carrying out such of its functions under Part II of the Act as comprise the supply of water for drinking, washing or cooking, a water authority shall not 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 (2):

Provided that this paragraph shall not require an authority to disinfect water from such ground water source as is specified in an authorisation given by the Secretary of State for the purposes of this paragraph.

(2) The further treatment mentioned in paragraph (1) is such treatment as is required to secure compliance with Council Directive 75/440/EEC (quality required of surface water intended for the abstraction of drinking water) (a); and for the purposes of this regulation,

(a) OJ No. L194, 25.7.1975, p.26.

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 30C(1) of the Control of Pollution Act 1974(a) is, as appropriate, DW1 or DW2 or DW3, as set out in the Surface Waters (Classification) (Scotland) Regulations 1990(b).

(3) Until such time as a notice under section 30C(1) of the said Act is served in relation to any waters, those waters shall for the purposes of this regulation be treated as falling within the category A1 or A2 or A3 if the waters were classified as being of that category by a water authority before the making of these Regulations and that classification is notified to the Secretary of State before these Regulations come into force.

(4) Except with the consent of the Secretary of State, water shall not be abstracted for supply for domestic purposes which include drinking except from waters to be treated as falling within category A1 or A2 or A3 in the Annex.

Contamination from pipes

24.—(1) Where there is a risk ("the prescribed risk") that water supplied by a water authority would, for the reason mentioned in paragraph (2) below, cease to comply with the requirements of Part II of these Regulations after leaving the authority's pipes, a water authority shall, subject to paragraphs (4) and (5)—

- (a) treat the water in such a way as will, in its opinion, eliminate the prescribed risk or reduce it to a minimum; and
- (b) where the risk relates to lead, remove its part of any pipe to which this sub-paragraph applies when such part of the remainder of that pipe as connects directly to a tap used for the supply of drinking water is removed.

(2) The reason referred to in paragraph (1) is the presence in the water of a concentration of copper, lead or zinc which exceeds the prescribed concentration and which is attributable to the fact that—

- (a) copper or lead is the major component; or
- (b) zinc is a component,

of such a pipe as is mentioned in section 76A(3)(a) of the Act.

(3) Paragraph (1)(b) applies to a lead pipe which is subject to water pressure from a main or would be so subject but for the closing of some valve and which belongs, as to part, to a water authority and, as to the remainder, to the owner of any premises to which the water authority supplies water for domestic purposes.

(4) Paragraph (1) shall not require a water authority to treat water —

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

(5) Paragraph (1) shall not require a water authority to remove a pipe unless it has received a request in writing to do so from the owner of the premises in question.

Application and introduction of substances and products

25.—(1) A water authority shall not, otherwise than for the purposes of testing or research, apply any substance or product to, or introduce any substance or product into, water which is to be supplied for drinking, washing or cooking unless—

- (a) the Secretary of State has for the time being approved the application or introduction of that substance or product and it is applied or introduced in accordance with any conditions attaching to that approval; or
- (b) the authority is 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; or

(a) 1974 c.40; section 30C was added by the Water Act 1989 (c.15), Schedule 23, paragraph 4.
(b) S.I. 1990/121.

- (c) the authority can demonstrate that the substance or product has during the period of twelve months preceding the making of these Regulations been applied or introduced (otherwise than for the purposes of testing or research) by another water authority in Scotland or, in England and Wales, by a water authority or a statutory water company into water supplied by it for domestic purposes; or
- (d) the substance or product—
 - (i) was at any time before the commencement of these Regulations listed in the 15th Statement of the Committee on Chemicals and Materials of Construction for Use in Public Water Supply and Swimming Pools(a) or in any supplement to that Statement issued before the making of these Regulations; and
 - (ii) is applied or introduced in accordance with any conditions referred to in that Statement or any supplement so issued or any such conditions as varied under paragraph (5) of this regulation and any conditions imposed under that paragraph.

Sub-paragraphs (b) to (d) have effect subject to paragraph (4) below.

(2) An application for such an approval as is mentioned in paragraph (1)(a) may be made by any person.

(3) The Secretary of State may, if he decides to issue an approval for the purpose of paragraph (1)(a), include in the approval such conditions as he considers appropriate and, subject to paragraph (6), may at any time revoke or vary any approval he has previously given.

(4) The Secretary of State may by notice given in writing to any water authority prohibit it for such a period as is specified in the notice from applying to, or introducing into, water intended to be supplied for drinking, washing or cooking any substance or product which the authority would otherwise be authorised to apply or introduce by paragraph (1)(b), (c) or (d).

(5) The Secretary of State may by notice in writing to water authorities vary any condition contained in the 15th Statement or any supplement referred to in paragraph (1)(d)(i) or impose conditions as to the application or introduction of any substance or product listed in that Statement or any supplement.

(6) The Secretary of State may—

- (a) revoke by an instrument in writing any approval given by him for the purposes of paragraph (1)(a);
- (b) modify any such approval by an instrument in writing by including conditions, or varying existing conditions;
- (c) issue any such notice as is mentioned in paragraph (4);

but, unless he is 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 his 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 of his intention.

(7) Notice shall be given forthwith by the Secretary of State to all persons likely to be affected by the making of such an instrument as is mentioned in paragraph (6)(a) or (b).

(8) At least once in each year beginning with the year 1990, the Secretary of State shall issue a list of all the substances and products in relation to which—

- (a) an approval for the purposes of paragraph (1)(a) has been granted or refused;
- (b) such an approval has been revoked or modified;
- (c) a notice has been issued under paragraph (4),

with particulars of the action taken.

Use of processes

26.—(1) The Secretary of State may at any time by notice in writing given to a water authority require it to make an application to him 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 drinking, washing or cooking.

(a) The 15th Statement was issued in March 1989. Copies of it and of any supplement may be obtained from the Scottish Development Department, 27 Perth Street, Edinburgh, EH5 3RB.

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

(3) The Secretary of State 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 he has given to the water authority at least six months' notice in writing of his intention:

Provided that this paragraph shall not apply in any case in which the Secretary of State is of the opinion that the immediate revocation, modification or prohibition is necessary in the interests of public health.

(4) Paragraph (8) of regulation 25 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 (1)(a) and paragraph (4) there were substituted a reference to this regulation and paragraph (1) of this regulation respectively.

Offences

27.—(1) A water authority, which applies or introduces any substance or product in contravention of regulation 25(1) or a notice given under regulation 25(4), or uses any process in contravention of a prohibition imposed under regulation 26(1) or without complying with a condition imposed by virtue of regulation 26(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) In any proceedings against a water authority for an offence under paragraph (1) it shall be a defence for that authority to show that it took all reasonable steps and exercised all due diligence to avoid the commission of the offence.

PART VII RECORDS AND INFORMATION

Maintenance of records

28.—(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) if not comprised in the name of the zone, the name or names of any water treatment works from which water is supplied to premises within the zone;
- (c) an estimate of the population of the zone;
- (d) particulars of any relaxation granted under Part III of these Regulations which applies to water supplied in the zone;
- (e) particulars of any action taken or required to be taken by the authority to comply with undertakings given pursuant to section 76E(4)(b)(a) in respect of its duties under section 76A of the Act so far as they relate to the zone;
- (f) particulars of the result of any analysis of samples taken in accordance with Part IV of these Regulations or regulations 16 to 19;
- (g) information in the form in Schedule 3 hereto.

(2) A water authority shall make—

- (a) initial entries in the record in respect of the matters mentioned in paragraph (1)(a) to (e) before 1st July 1990;

(a) 1980 c.45; section 76E was added by the Water Act 1989, Schedule 23, paragraph 1.

- (b) 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; and
- (c) an entry of the information mentioned in paragraph (1)(g) when regulation 29(3) is complied with.

(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 a water authority to retain a record of any information mentioned in paragraph (1)(f) or (g) at any time more than five years after the date on which the information was first entered in the record.

Publication and provision of information

29.—(1) A water authority shall make available for inspection by the public at all reasonable hours at such of its offices as are normally open to the public any record maintained by it in accordance with regulation 28.

(2) A water authority shall provide to any person, on request, a copy of any part of a record maintained in accordance with regulation 28 and may, in respect of each copy so provided, require payment of the sum of 25 pence (each A4 sheet provided being charged as one copy).

(3) A water authority shall, not later than 30th June in each year, commencing with the year 1991, supply to a district or islands council information in the form set out in Schedule 3 to these Regulations relating to the preceding year concerning the general quality of water supplied to premises in that council's area, and so far as the information is relevant to the council's area—

- (a) the samples taken in respect of each parameter;
- (b) the extent to which the authority has complied with the requirements of Parts II and IV of these Regulations; and
- (c) the action taken by the authority to comply with undertakings given pursuant to section 76E(4)(b) in respect of its duties under section 76A of the Act:

Provided that the information required to be supplied before 30th June 1991 shall cover the six month period ending 31st December 1990.

(4) A water authority shall notify a district or islands council and a health board 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 it, gives rise or is likely to give rise to a significant risk to the health of persons residing in the area of that council or board.

(5) A council or board who have received a notification under paragraph (4) may require the water authority to provide them with such information relating to the event and its consequences as they may reasonably require.

(6) In this regulation "health board" means a board constituted under section 2 of the National Health Service (Scotland) Act 1978(a).

Annual report

30.—(1) A water authority shall prepare a report for the period from 1st July 1990 to 31st December 1990 and for each year thereafter containing—

- (a) a summary of the quality of water supplied by it for domestic purposes;
- (b) a statement as to the extent to which water supplied by it complied with Part II of these Regulations;
- (c) particulars of any relaxation granted under Part III which applies to water supplied by it;
- (d) a statement of the action that it has taken or is required to take and has not yet taken to comply with undertakings given pursuant to section 76E(4)(b) in respect of its duties under section 76A of the Act; and
- (e) a statement that a person may inspect any record maintained in accordance with regulation 28 and particulars of the times and places at which such inspection may be made.

(a) 1978 c.29.

(2) The statement required by paragraph (1)(b) shall specify, in the form set out in Form A and Form B in Schedule 4 to these Regulations, the number of the results of the analysis of samples which established a concentration or value in respect of any parameter which contravened the prescribed concentration or value.

(3) On or before 30th June a water authority shall publish the report prepared for the preceding year or part of a year, as the case may be, in accordance with paragraph (1) and shall at the same time send a copy to every district or islands council within whose area it supplies water.

PART VIII

FUNCTIONS OF LOCAL AUTHORITIES IN RELATION TO WATER QUALITY

Application and interpretation

31.—(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 falls within the area of that authority.

Duties of local authorities – supplementary provision

32.—(1) In performing their duty under section 76F(1) of the Act, a local authority—

- (a) shall make such arrangements with the relevant water authority as will secure that they are notified as mentioned in regulation 29(4); and
- (b) may take and analyse, or cause to be analysed, by a person designated by them in writing, such samples of the water supplied to premises in their area as they may reasonably require.

(2) Regulation 21 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), for the words “either the laboratory or the authority” there shall be substituted the words “the laboratory, the water authority or the local authority”.

St. Andrew's House, Edinburgh
23rd January 1990

James Douglas-Hamilton
Parliamentary Under Secretary of State,
Scottish Office

PRESCRIBED CONCENTRATIONS OR VALUES

TABLE A

<i>Item</i>	<i>Parameters</i>	<i>Units of Measurement</i>	<i>Concentration or Value (maximum unless otherwise stated)</i>
1.	Colour	mg/l Pt/Co scale	20
2.	Turbidity (including suspended solids)	Formazin turbidity units	4
3.	Odour (including hydrogen sulphide)	Dilution number	3 at 25°C
4.	Taste	Dilution number	3 at 25°C
5.	Temperature	°C	25
6.	Hydrogen ion	pH value	9.5 5.5 (minimum)
7.	Sulphate	mg SO ₄ /l	250
8.	Magnesium	mg Mg/l	50
9.	Sodium	mg Na/l	150(i)
10.	Potassium	mg K/l	12
11.	Dry residues	mg/l	1500 (after drying at 180°C)
12.	Nitrate	mg NO ₃ /l	50
13.	Nitrite	mg NO ₂ /l	0.1
14.	Ammonium (ammonia and ammonium ions)	mg NH ₄ /l	0.5
15.	Kjeldahl nitrogen	mg N/l	1
16.	Oxidizability (permanganate value)	mg O ₂ /l	5
17.	Total organic carbon	mg C/l	No significant increase over that normally observed
18.	Dissolved or emulsified hydrocarbons (after extraction with petroleum ether); mineral oils	µg/l	10
19.	Phenols	µg C ₆ H ₅ OH/l	0.5
20.	Surfactants	µg/l (as lauryl sulphate)	200
21.	Aluminium	µg Al/l	200
22.	Iron	µg Fe/l	200
23.	Manganese	µg Mn/l	50
24.	Copper	µg Cu/l	3000
25.	Zinc	µg Zn/l	5000
26.	Phosphorus	µg P/l	2200
27.	Fluoride	µg F/l	1500
28.	Silver	µg Ag/l	10(ii)

Note (i) See regulation 3(5).

(ii) If silver is used in a water treatment process, 80 may be substituted for 10.

TABLE B

Item	Parameters	Units of Measurement	Maximum Concentration
1.	Arsenic	µg As/l	50
2.	Cadmium	µg Cd/l	5
3.	Cyanide	µg CN/l	50
4.	Chromium	µg Cr/l	50
5.	Mercury	µg Hg/l	1
6.	Nickel	µg Ni/l	50
7.	Lead	µg Pb/l	50
8.	Antimony	µg Sb/l	10
9.	Selenium	µg Se/l	10
10.	Pesticides and related products:		
	(a) individual substances	µg/l	0.1
	(b) total substances(i)	µg/l	0.5
11.	Polycyclic aromatic hydrocarbons(ii)	µg/l	0.2

Notes (i) The sum of the detected concentrations of individual substances.

(ii) The sum of the detected concentrations of fluoranthene, benzo 3,4 fluoranthene, benzo 1,1,2 fluoranthene, benzo 3,4 pyrene, benzo 1,1,2 perylene and indeno (1,2,3-cd) pyrene.

TABLE C

Item	Parameters	Units of Measurement	Maximum Concentration
1.	Total coliforms	number/100 ml	0(i)
2.	Faecal coliforms	number/100 ml	0
3.	Faecal streptococci	number/100 ml	0
4.	Sulphite-reducing clostridia	number/20 ml	≤ 1(ii)
5.	Colony counts	number/1 ml at 22°C or 37°C	No significant increase over that normally observed

Notes (i) See regulation 3(6).

(ii) Analysis by multiple tube method.

TABLE D(i)

Item	Parameters	Units of Measurement	Maximum Concentration or Value
1.	Conductivity	µS/cm	1500 at 20°C
2.	Chloride	mg Cl/l	400
3.	Calcium	mg Ca/l	250
4.	Substances extractable in chloroform	mg/l dry residue	1
5.	Boron	µg B/l	2000
6.	Barium	µg Ba/l	1000
7.	Benzo 3,4 pyrene	ng/l	10
8.	Tetrachloromethane	µg/l	3
9.	Trichloroethene	µg/l	30
10.	Tetrachloroethene	µg/l	10

Note: (i) See regulation 3(3)(d).

TABLE E

Item	Parameters	Units of Measurement	Minimum Concentration(i)
1.	Total hardness	mg Ca/l	60
2.	Alkalinity	mg HCO ₃ /l	30

Note: (i) See regulation 3(2).

SAMPLING FREQUENCIES

TABLE 1: Sampling frequencies at consumers' taps

Parameters	Water Supply Zone		Sampling Frequency (number per annum)			
	Volume distributed (m ³ /d) for domestic purposes	Population Supplied	Reduced		Standard	Increased
			Ground water	Surface water		
Conductivity or hydrogen ion	≤ 100	≤ 500			4	12
	101- 1000	501- 5000	4	4	6	12
Odour (qualitative)	1001- 2000	5001-10000	4	6	12	24
	2001- 4000	10001-20000	6	12	24	
Taste (qualitative)	4001- 7000	20001-35000	11	21	42	
	7001-10000	35001-50000	15	30	60	

TABLE 2: Sampling frequencies at consumers' taps

Parameters	Water Supply Zone		Sampling Frequency (number per annum)			
	Volume distributed (m ³ /d) for domestic purposes	Population Supplied	Reduced		Standard	Increased
			Ground water	Surface water		
Odour (quantitative)	≤ 100	≤ 500			4	12
	101- 1000	501- 5000			4	12
Taste (quantitative)	1001- 2000	5001-10000			4	24
	2001- 4000	10001-20000	4	4	6	24
Nitrate	4001- 7000	20001-35000	4	5	10	36
Nitrite	7001-10000	35001-50000	4	5	10	48
Ammonium						
Iron						
Aluminium						
Manganese						
Colour						

TABLE 3: Sampling frequencies at consumers' taps

Parameters	Water Supply Zone		Sampling Frequency (number per annum)		
	Volume distributed (m ³ /d) for domestic purposes	Population Supplied	Reduced	Standard	Increased
Trihalomethanes Tetrachloromethane Trichloroethene Tetrachloroethene	≤ 7000	≤ 35000	1	4	12
Copper Lead Zinc Pesticides(i) Polycyclic aromatic hydrocarbons(ii)		35001-50000	1	4	24

Notes (i) ie any fungicide, herbicide or insecticide; increased or reduced sampling, where required or permitted, may be confined to the substance in question.

(ii) The sum of the detected concentrations of fluoranthene, benzo 3.4 fluoranthene, benzo 1.1.12 fluoranthene, benzo 3.4 pyrene, benzo 1.1.2 perylene and indeno (1,2,3-cd) pyrene.

TABLE 4: Sampling frequencies at consumers' taps

Parameters	Sampling Frequency (number per annum)	
	Standard	Increased
Chloride Sulphate Calcium Magnesium Sodium Potassium Dry residues Oxidizability (permanganate value) Total organic carbon Boron Surfactants Phosphorus Fluoride Barium Silver Arsenic Cadmium Cyanide Chromium Mercury Nickel Antimony Selenium Total hardness Alkalinity	1	12

TABLE 5: Sampling frequencies at supply points

<i>Water Supply Zone or Combination of Zones</i>		<i>Sampling Frequency (number per annum)</i>															
<i>Volume distributed (m³/d) for domestic purposes</i>	<i>Population Supplied</i>	<i>Table 1* Parameters</i>			<i>Table 2* Parameters</i>			<i>Table 3* Parameters</i>			<i>Table 4* Parameters</i>						
		<i>Reduced</i>	<i>Standard</i>	<i>Increased</i>	<i>Reduced</i>	<i>Standard</i>	<i>Increased</i>	<i>Reduced</i>	<i>Standard</i>	<i>Increased</i>	<i>Reduced</i>	<i>Standard</i>	<i>Increased</i>				
		<i>GW</i>	<i>SW</i>		<i>GW</i>	<i>SW</i>		<i>GW</i>	<i>SW</i>		<i>GW</i>	<i>SW</i>					
≤ 100	≤ 500			4			4			1	2			1	12		
101- 1000	501- 5000	4	4	6			4			1	2			1	12		
1001- 2000	5001- 10000	4	6	12			4			1	2			1	12		
2001- 4000	10001- 20000	6	12	24			4			1	2			1	12		
4001- 10000	20001- 50000	15	30	60	4	4	6			1	2			1	12		
10001- 20000	50001- 100000	30	60	120	4	5	10			1	2			1	12		
20001- 30000	100001- 150000	30	60	120	5	10	20			2	3			2	24		
30001- 60000	150001- 300000	45	90	180	8	15	30			2	3			1	2	3	24
60001-100000	300001- 500000	90	180	360	15	30	60			2	3			2	3	6	24
100001-200000	500001-1000000	90	180	360	30	60	120			3	5			3	5	10	24
		90	180	360	30	60	120			5	10			5	10	20	36

GW = Ground water
 SW = Surface water

*Reference is to Tables 1 to 4 of this Schedule.

TABLE 6: Sampling frequencies at consumers' taps

<i>Parameters</i>	<i>Water Supply Zone</i>		<i>Sampling Frequency (number per annum)</i>
	<i>Volume distributed (m³/d) for domestic purposes</i>	<i>Population Supplied</i>	<i>Standard</i>
Total coliforms	≤ 100	≤ 500	12
Faecal coliforms	101-1000	501- 5000	12
Residual disinfectant	1001-2000	5001-10000	24
Colony counts	2001-4000	10001-20000	48
		20001-50000	at the rate of 12 per 5000 population except in the case of colony counts where the standard number is 52.

TABLE 7: Sampling frequencies for treatment works

<i>Parameters</i>	<i>Volume of water supplied (m³/d) for domestic purposes</i>	<i>Sampling frequency (number per annum)</i>	
		<i>Reduced</i>	<i>Standard</i>
1. Total and faecal coliforms, residual disinfectant and colony counts	≤ 2000 2001-6000	12	52
		52	104
2. Total and faecal coliforms and residual disinfectant	6001-12000 > 12000	104	208
		104	365
3. Colony counts	> 6000	52	104

INFORMATION FOR LOCAL AUTHORITIES

WATER SUPPLY ZONE (NAME OF ZONE)					
(Period of report)					
<i>Parameter</i>	<i>No. of samples taken in period</i>	<i>% of samples contravening PCV</i>	<i>Concentration or Value (all samples)</i>		
			<i>Min.</i>	<i>Mean</i>	<i>Max.</i>
Commentary on Water Quality					
Action taken to comply with section 76E(4)(b) undertakings					
Note PCV = prescribed concentration or value					

INFORMATION TO BE INCLUDED IN ANNUAL REPORT

FORM A: Microbiological quality

(a) WATER LEAVING TREATMENT WORKS

<i>Volume of water distributed from works (m³/d)</i>	<i>No. of Samples</i>	<i>% of samples exceeding prescribed concentration or value</i>	
		<i>Total Coliforms</i>	<i>Faecal Coliforms</i>
less than 3,000			
3,000-12,000			
more than 12,000			
TOTAL			

(b) WATER IN SERVICE RESERVOIRS (INCLUDING WATER TOWERS)

<i>Capacity of reservoir (m³)</i>	<i>No. of Samples</i>	<i>% of samples exceeding prescribed concentration or value</i>	
		<i>Total Coliforms</i>	<i>Faecal Coliforms</i>
less than 2,000			
2,000-10,000			
more than 10,000			
TOTAL			

(c) WATER AT CONSUMERS' TAPS

<i>SIZE OF ZONE (POPULATION)</i>	<i>less than 5,000</i>	<i>5,000-20,000</i>	<i>20,001-50,000</i>	<i>TOTAL</i>
<i>Type of sample</i>				
Random No. of samples				
% exceeding PCV for TC				
% exceeding PCV for FC				
Fixed No. of samples				
% exceeding PCV for TC				
% exceeding PCV for FC				
Totals No. of samples				
% exceeding PCV for TC				
% exceeding PCV for FC				

Notes PCV = prescribed concentration or value.

TC = total coliforms.

FC = faecal coliforms.

FORM B: Physico-chemical quality

(1)	(2)	(3)	(4)	(5)	(6)	(7)(iii)	(8)
<i>Parameter(i)</i>	<i>Size of zone (Population)</i>	<i>No. of zones in size group</i>	<i>No. of samples</i>	<i>% exceeding PCV(ii)</i>	<i>No. of samples in column (5) which satisfy the terms of a relaxation given under Part III</i>	<i>No. of zones in which PCV contravened</i>	<i>No. of zones in column (7) in which action taken has remedied the contravention</i>
eg Colour	less than 5,000 5,000-20,000 20,001-50,000						
	TOTAL						
eg Iron	less than 5,000 5,000-20,000 20,001-50,000						
	TOTAL						
Total(iv)	less than 5,000 5,000-20,000 20,001-50,000		----- ----- -----	----- ----- -----			
	TOTAL		-----	-----			

Notes (i) For pesticides include each sample/zone where one or more pesticides fail to comply with 0.1 µg/l.

(ii) PCV = prescribed concentration or value.

(iii) Where a relaxation has been granted under Part III of the Regulations, this column should record only those zones in which samples contravene both the PCV and the terms of the relaxation.

(iv) A zone in respect of which a PCV has been contravened in relation to more than one parameter should be recorded only once in columns (7) and (8).

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations supplement Part VIA (Quality of Water) of the Water (Scotland) Act 1980 ("the 1980 Act"). They are primarily concerned with the quality of water supplied in Scotland for drinking, washing and cooking and with arrangements for the publication of information about water quality. The Regulations come into force on 1st May 1990, except regulations 13, 17, 18, 19 and 30 which come into force on 1st July 1990.

Effect is given in Part II of the Regulations to Article 7 of Council Directive 80/778/EEC(OJ No. L229, 30.8.80, p.11) which relates to the quality of water intended for human consumption. Part IV of the Regulations gives effect to paragraphs 1 to 4 of Article 12 (monitoring of the quality of water intended for human consumption) of that Directive. In Part IV of the Regulations, regulation 23 gives effect, in part, to Article 2 of Council Directive 75/440/EEC (quality required of surface water intended for the abstraction of drinking water) and to paragraph 3 of Article 4 of that Directive.

Part I of the Regulations defines terms that are used in the Regulations.

Part II prescribes standards of wholesomeness in respect of water that is supplied by water authorities (the regional and island councils) and private suppliers for drinking, washing or cooking. In particular, it provides that water is to be regarded as wholesome if it contains concentrations or values in respect of various properties, elements, organisms and substances which 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 3 but most are listed in Tables A to E which appear in Schedule 1 to the Regulations. They include the maximum admissible and minimum required concentrations and values specified in Annex I to Council Directive 80/778/EEC.

Part III enables the Secretary of State or, in the case of private water supplies, the Secretary of State or the appropriate local authority if so authorised, to relax the requirements of Part II subject to conditions, if appropriate. The circumstances in which such relaxation is permissible are consistent with those specified in paragraphs 1 and 3 of Article 9 and paragraph 1 of Article 10 of Council Directive 80/778/EEC.

Part IV provides for the monitoring of water supplies by reference to analysis of samples taken from consumers' taps. Regulation 11 requires water authorities to identify, in relation to areas which they are required to determine as "water supply zones", such number and location of consumers' taps as will ensure that the samples taken are representative of the quality of the water within the zone. In the circumstances specified in regulation 12 the Secretary of State may authorise the taking of samples from points other than consumers' taps. Regulation 13 requires water authorities to take a minimum number of samples ("the standard number") each year in respect of a variety of properties, elements, organisms and substances. The standard numbers are specified in Tables 1 to 6 in Schedule 2 to the Regulations and are not less than those specified in Annex II to Council Directive 80/778/EEC. Regulation 13 also requires samples to be taken where changes in the authorities' practices may have had an effect on the quality of the water within the water supply zones.

Part V contains additional provisions relating to sampling. Regulations 17 and 18 require samples to be taken in respect of particular organisms and substances at treatment works and at reservoirs which store treated water. Regulation 19 requires additional samples to be taken in certain circumstances. Regulation 20 requires samples to be taken before water is supplied from new sources and from sources which have not recently been used. Regulation 21 prescribes requirements relating to the taking, handling, storage, transport and analysis of samples.

Part VI deals with the treatment of water and regulates the substances, processes and products which may be used by water authorities in connection with the supply of water. Regulation 23 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. Regulation 24 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, lead or zinc. Regulation 25 specifies the circumstances in which water authorities

may apply or introduce substances or products into water supplied for drinking, washing or cooking. Regulation 26 enables the Secretary of State to require that his approval be obtained to the use of processes. Contravention of some of the requirements of regulations 25 and 26 is made a criminal offence by regulation 27.

Part VII deals with the publication and provision of information by water authorities. Regulation 28 requires the authorities to prepare and maintain records containing information about the quality of water supplied in their water supply zones. Regulation 29 requires each water authority to make these records available for public inspection and to supply local authorities (district and islands councils) with information about the quality of water within its water supply zones, the extent to which Part II of the Regulations has been complied with, details of any relaxations granted under Part III of the Regulations and of the action which has been taken to comply with undertakings given pursuant to section 76E(4)(b) of the 1980 Act. It also requires each water authority to provide local authorities and health boards with information relating to matters that could affect the health of persons residing in their areas. Regulation 30 requires water authorities to publish an annual report containing information about the quality of water in the area for which it is responsible.

Part VIII imposes requirements on local authorities in the performance of their duties in relation to the quality of water supplied by water authorities. Regulation 32 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.