SCHEDULE 3 Regulations 11, 12 and 16

**Requirements for spring water and drinking water including prescribed concentrations or values of parameters**

# PART I

## Requirements for spring water and drinking water

1. Water satisfies the requirements of this Schedule if—

(a) the water does not contain any property, element, organism, or substance—

(i) (other than a parameter) at a concentration or value which would be injurious to health;

(ii) (whether or not a parameter) at a concentration or value which in conjunction with any other property, element, organism or substance it contains (whether or not a parameter) would be injurious to health;

(b) the water does not contain—

(i) concentrations or values of any of the parameters listed in Tables A to D in Part II in excess of the prescribed concentrations or values;

(ii) concentrations of trihalomethanes (being the aggregate of the concentrations of trichloromethane, dichlorobromomethane, dibromochloromethane and tribromomethane) in excess of 100 181 g/1; and

(c) in the case of water prepared from water which has been softened or desalinated, its hardness is not below a minimum concentration of 60 mg Ca/1 and its alkalinity is not below a minimum concentration of 30 mg HCO3/1.

2. The concentrations or values of the parameters listed in Tables A to D in Part II shall be read in conjunction with the notes thereto.

# PART II

## Prescribed Concentrations or Values

**TABLE A**

| Column 1<br>*Item* | Column 2<br>*Parameters* | Column 3<br>*Units of Measurement* | Column 4<br>*Concentration or Value (maximum unless otherwise stated)* |
|---|---|---|---|
| 1. | Colour | mg/1 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 | |

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

| Column 1<br>*Item* | Column 2<br>*Parameters* | Column 3<br>*Units of Measurement* | Column 4<br>*Concentration or Value (maximum unless otherwise stated)* |
|---|---|---|---|
| 5. | Temperature | °C | 25 |
| 6. | Sulphate | Mg $SO_4$/1 | 250 |
| 7. | Magnesium | Mg mg/1 | 50 |
| 8 | Sodium | Mg Na/1 | 150 |
| 9. | Potassium | Mg K/1 | 12 |
| 10. | Dry residues | mg/1 | 1500 (after drying at 180°C) |
| 11. | Nitrate | Mg $NO_3$/1 | 50 |
| 12. | Nitrite | Mg $NO_2$/1 | 0.1 |
| 13. | Ammonium (ammonia and ammonium ions) | Mg $NH_4$/1 | 0.5 |
| 14. | Kjeldahl nitrogen | Mg N/1 | 1 |
| 15. | Oxidizability (permanganate value) | Mg $O_2$/1 | 5 |
| 16. | Total organic carbon | Mg C/1 | No significant increase over that normally observed |
| 17. | Dissolved or emulsified hydrocarbons (after extraction with petroleum ether); mineral oils | µg/1 | 10 |
| 18. | Phenols | µg $C_6H_5OH$/1 | 0.5 |
| 19. | Surfactants | µg/1 (as lauryl sulphate) | 200 |
| 20. | Aluminium | µg A1/1 | 200 |
| 21. | Iron | µg Fe/1 | 200 |
| 22. | Manganese | µg Mn/1 | 50 |
| 23. | Copper | µg Cu/1 | 3000 |
| 24. | Zinc | µg Zn/1 | 5000 |
| 25. | Phosphorus | µg P/1 | 2200 |
| 26. | Fluoride | µg F/1 | 1500 |
| 27. | Silver | µg Ag/1 | 10[(i)] |

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

**TABLE B**

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

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

**(ii)** Notes (ii) The sum of the detected concentrations of fluoranthene, benzo 3,4 fluoranthene, benzo 11.12 fluoranthene, benzo 3.4 pyrene, benzo 1.12 perylene and indeno (1, 2, 3-cd) pyrene.

**TABLE C**

| Column 1<br>*Item* | Column 2<br>*Parameters* | Column 3<br>*Units of Measurement* | Column 4<br>*Maximum Concentration* |
|---|---|---|---|
| 1. | Total coliforms | number/100 ml | 0 |
| 2. | Faecal coliforms | number/100 ml | 0 |
| 3. | Faecal streptococci | number/100 ml | 0 |
| 4. | Sulphite-reducing clostridia | number/20 ml | ≥1[(i)] |
| 5. | Colony counts | number/1 ml at 22°C | 100[(ii)] |
| | | number/1 ml at 37°C | 20[(ii)] |

**(i)** Notes (i) Analysis by multiple tube method.

**(ii)** Notes (ii) The total viable colony count should be measured within 12 hours of bottling with the sample water being kept at a constant temperature during that 12-hour period. Any increase in the total viable colony count of the water between 12 hours after bottling and the time of sale shall not be greater than that normally expected.

**TABLE D**

| Column 1<br>*Item* | Column 2<br>*Parameters* | Column 3<br>*Units of Measurement* | Column 4<br>*Maximum Concentration or Value* |
|---|---|---|---|
| 1. | Conductivity | µS/cm | 1500 at 20°C |
| 2. | Chloride | mg C1/1 | 400 |
| 3. | Calcium | mg Ca/1 | 250 |
| 4. | Substances extractable in chloroform | mg/1 dry residue | 1 |
| 5. | Boron | µg B/1 | 2000 |
| 6. | Barium | µg Ba/1 | 1000 |
| 7. | Benzo 3.4 pyrene | ng/1 | 10 |
| 8. | Tetrachloromethane | µg/1 | 3 |
| 9. | Trichloroethene | µg/1 | 30 |
| 10. | Tetrachloroethene | µg/1 | 10 |