$MgSO_4\!\cdot\!7H_2O$

Agar

Water

Bromocresol purple

SCHEDULE 4

regulation 16

ANALYTICAL METHODOLOGY

TABLE A1

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

(1)	(2)		
Parameter	Method		
Clostridium perfringens (including spores)	Membrane filtration followed by anaerobic incubation of the membrane on m-CP agar* at 44 ± 1 °C for 21 ± 3 hours. Count opaque yellow colonies that turn pink or red after exposure to ammonium hydroxide vapours for 20 to 30 seconds.		
Coliform bacteria	ISO 9308-1		
Colony count 22°C — enumeration of culturable microorganisms	prEN ISO 6222		
Colony count 37°C— enumeration of culturable microorganisms	prEN ISO 6222		
Enterococci	ISO 7899-2		
Escherichia coli (E. coli)	ISO 9308-1		
*The composition of m-CP agar is:			
Basal medium			
Tryptose	30.0g		
Yeast extract	20.0g		
Sucrose	5.0g		
L-cysteine hydrochloride	1.0g		

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:

0.1g

40.0mg 15.0g

1,000.0ml

D-cycloserine	400.0mg
Polymyxine-B sulphate	25.0mg

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

TABLE A2

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

(1) Parameters	(2) Trueness % of prescribed concentration or value or specification	(3) Precision % of prescribed concentration or value or specification	(4) Limit of detection % of prescribed concentration or value or specification
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

Notes:

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

(1)	(2)	(3)	(4)
Parameters	Trueness %	Precision %	Limit of detection
	of prescribed	of prescribed	% of prescribed
	concentration or value or specification	concentration or value or specification	concentration or value or specification
Cyanide ⁽ⁱ⁾	10	10	10
1,2-dichloroethane	25	25	10
Fluoride	10	10	10
Iron	10	10	10
Lead	10	10	10
Manganese	10	10	10
Mercury	20	10	20
Nickel	10	10	10
Nitrate	10	10	10
Nitrite	10	10	10
Pesticides and related products ⁽ⁱⁱ⁾	25	25	25
Polycyclic aromatic hydrocarbons ⁽ⁱⁱⁱ⁾	25	25	25
Selenium	10	10	10
Sodium	10	10	10
Sulphate	10	10	10
Tetrachloromethane	20	20	20
Trichloroethene(iv)	25	25	10
Trihalomethanes: Total ⁽ⁱⁱⁱ⁾	25	25	10
Turbidity ^(v)	10	10	10
Turbidity (vi)	25	25	25

Notes:

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