Appendix 5

Methods of Determination of Water Quality Parameters

Parameter	Recommended Method
1. Temperature	Thermometeric method
2. pH	Electromatic method
3. TSS	Nephlometric method
4. Velocity of Flow	1) Current method
	2) Float method
	3) Chemical method
5. Dissolved Oxygen	Iodometric method
6. Biochemical Oxygen Demand	Dilution method
7. Total Kjeldahl Nitrogen	a) Digestion
	b) Distillation
	1) Titration method (>5mg/1)
	2) Nesslerization method (<5mg/1)
8. Nitrogen, nitrate + nitrite	Amalgamated Cadmium Reduction method for reduction of nitrate to nitrite by diazotisation method
9. Total Coliform (MPN)	Multiple Tube Dilution technique
10. Fecal Coliform (MPN)	Multiple Tube Dilution technique
11. Conductivity	Conductometric method
12. Chloride*	1) Argentometric method
	2) Mercurimetric method
13. Hardness	EDTA Titrimetric method
14. Calcium	EDTA Titrimetric method
15. Magnesium	By difference of 13 & 14
16. Alkalinity	1) Electrometric method
	2) Visual titration method

Parameter	Recommended Method
17. Sulphate**	Turbidimetric method
18. Sodium	Flame photometric method
19. Chemical Oxygen Demand	Dichromate reflux method
20. Total Dissolved Solids	
&	Gravemetric method
21. Fixed Dissolved Solids	
22. Phosphate	Molybdate method (Colorimetry)
23. Boron	Curcumine method (Colorimetry)
24. Free Ammonia	

Source: Water Quality - Status & Statistics (1996 & 1997)
Central Pollution Control Board

Argentometric method has been given first preference but if the colour of the sample interferes with the chromate end point then mercurimetric method should be used. Usually sulphate concentration is low in surface waters & hence gravimetric method may not be accurate as turbidimetric method, therefore, turbidimetric method is suggested.

Note: Wherever more than one methods are given, they are in order of preference.