

**BIS Standards-10500- (2004-05) is followed for testing the  
Quality of water in Water Supply Schemes**

Sl.No	Parameter	Type	Acceptable	Maximum allowable
1.	Colour Pt/Co scale	Physical	5	25
2.	Taste & Odour	Physical	Un objectionable	Un objectionable
3.	Turbidity NTU	Physical	5	10
4.	Total Dissolved Solids mg/L	Physical	500	2000
5.	pH	Non Metal	6.5-8.5	6.5-8.5
6.	Alkalinity (as CaCO <sub>3</sub> ) mg/L	Non Metal	200	600
7.	Total Hardness (as CaCO <sub>3</sub> ) mg/L	Metal	300	600
8.	Calcium (as Ca) mg/L	Metal	75	200
9.	Magnesium (as Mg) mg/L	Metal	30	100
10.	Sodium (as Na) mg/L	Metal	-	-
11.	Iron (as Fe) mg/L	Metal	0.3	1.0
12.	Manganese (as Mn) mg/L	Metal	0.1	0.3
13.	Chloride (as Cl) mg/L	Non Metal	250	1000
14.	Fluoride (as F) mg/L	Non Metal	1	1.5`
15.	Sulphate (as SO <sub>4</sub> ) mg/L	Non Metal	200	400
16.	Nitrate (as NO <sub>3</sub> ) mg/L	Non Metal	45	45
17.	Copper (as Cu) mg/L	Metal	0.05	1.5
18.	Cadmium ( as Cd) mg/L	Metal	0.01	0.01
19.	Selenium ( as Se) mg/L	Metal	0.01	0.01
20.	Mercury (as Hg) mg/L	Metal	0.001	0.001
21.	Arsenic (as As ) mg/L	Metal	0.05	0.05
22.	Lead (as Pb) mg/L	Metal	0.05	0.05
23.	Zinc (as Zn) mg/L	Metal	5.0	15.0
24.	Chromium (as Cr) mg/L	Metal	0.05	0.05
25.	Cyanide (as CN) mg/L	Non Metal	0.05	0.05
26.	Anionic Detergents (as MBAS) mg/L	Non Metal	0.2	1.0
27.	Phenolic compounds mg/L	Non Metal	0.001	0.002
28.	Polynuclear aromatic hydrocarbons (PAH) mic g/L	Non Metal	-	-
29.	Mineral oil mg/L	Non Metal	0.01	0.03
30.	Pesticides mg/L	Non Metal	absent	0.001
31.	Free Chlorine mg/L	Non Metal	0.2	0.2
32.	Aluminium mg/L	Metal	0.03	0.2
33.	Boron mg/L	Non metal	1	5.0
34.	Alpha emitters Bq/L	Rad	-	0.1
35.	Beta emitters Bq/L	Rad	-	1
36.	Fecal Coliform Counts/mL	Bact.	-	Nil
37.	Protozoa	Biological	-	Nil
38.	Helminths	Biological	-	Nil
39.	Free living organisms	Biological	-	Nil

## Drinking water quality guide lines- CPHEEO 1999

Sl. No	Parameter	Type	Acceptable	Maximum allowable
1.	Colour Pt/Co scale	Physical	5	25
2.	Taste & Odour	Physical	Un objectionable	Un objectionable
3.	Turbidity NTU	Physical	1	10
4.	Total Dissolved Solids mg/L	Physical	500	2000
5.	pH	Non Metal	7.0-8.5	6.5-9.2
6.	Alkalinity (as CaCO <sub>3</sub> ) mg/L	Non Metal	200	600
7.	Total Hardness (as CaCO <sub>3</sub> ) mg/L	Metal	200	600
8.	Calcium (as Ca) mg/L	Metal	75	200
9.	Magnesium (as Mg) mg/L	Metal	>=30	150
10.	Sodium (as Na) mg/L	Metal	-	-
11.	Iron (as Fe) mg/L	Metal	0.1	1.0
12.	Manganese (as Mn) mg/L	Metal	0.05	0.5
13.	Chloride (as Cl) mg/L	Non Metal	200	1000
14.	Fluoride (as F) mg/L	Non Metal	1	1.5
15.	Sulphate (as SO <sub>4</sub> ) mg/L	Non Metal	200	400
16.	Nitrate (as NO <sub>3</sub> ) mg/L	Non Metal	45	45
17.	Copper (as Cu) mg/L	Metal	0.05	1.5
18.	Cadmium (as Cd) mg/L	Metal	0.01	0.01
19.	Selenium (as Se) mg/L	Metal	0.01	0.01
20.	Mercury (as Hg) mg/L	Metal	0.001	0.001
21.	Arsenic (as As) mg/L	Metal	0.01	0.05
22.	Lead (as Pb) mg/L	Metal	0.05	0.05
23.	Zinc (as Zn) mg/L	Metal	5.0	15.0
24.	Chromium (as Cr) mg/L	Metal	0.05	0.05
25.	Cyanide (as CN) mg/L	Non Metal	0.05	0.05
26.	Anionic Detergents (as MBAS) mg/L	Non Metal	0.2	1.0
27.	Phenolic compounds mg/L	Non Metal	0.001	0.002
28.	Polynuclear aromatic hydrocarbons (PAH) mic g/L	Non Metal	0.2	0.2
29.	Mineral oil mg/L	Non Metal	0.01	0.03
30.	Pesticides mg/L	Non Metal	absent	As per WHO
31.	Free Chlorine mg/L	Non Metal	0.2	1.0
32.	Aluminium mg/L	Metal	0.03	0.2
33.	Boron mg/L	Non metal	-	-
34.	Alpha emitters Bq/L	Rad	0.1	0.1

Sl. No	Parameter	Type	Acceptable	Maximum allowable
35.	Beta emitters Bq/L	Rad	1	1
36.	Fecal Coliform Counts/mL	Bact.	Nil	Nil
37.	Protozoa	Biological	Nil	Nil
38.	Helminths	Biological	Nil	Nil
39.	Free living organisms	Biological	Nil	Nil

### Water Quality Guide lines WHO

Sl. No	Parameter	Type	Acceptable
1.	Colour Pt/Co scale	Physical	15
2.	Taste & Odour	Physical	-
3.	Turbidity NTU	Physical	5
4.	Total Dissolved Solids mg/L	Physical	1000
5.	pH	Non Metal	-
6.	Alkalinity (as CaCO <sub>3</sub> ) mg/L	Non Metal	-
7.	Total Hardness (as CaCO <sub>3</sub> ) mg/L	Metal	-
8.	Calcium (as Ca) mg/L	Metal	-
9.	Magnesium (as Mg) mg/L	Metal	-
10.	Sodium (as Na) mg/L	Metal	200
11.	Iron (as Fe) mg/L	Metal	0.3
12.	Manganese (as Mn) mg/L	Metal	0.1
13.	Chloride (as Cl) mg/L	Non Metal	250
14.	Fluoride (as F) mg/L	Non Metal	1.5
15.	Sulphate (as SO <sub>4</sub> ) mg/L	Non Metal	250
16.	Nitrate (as NO <sub>3</sub> ) mg/L	Non Metal	50
17.	Copper (as Cu) mg/L	Metal	2.0
18.	Cadmium (as Cd) mg/L	Metal	0.003
19.	Selenium (as Se) mg/L	Metal	0.01
20.	Mercury (as Hg) mg/L	Metal	0.001
21.	Arsenic (as As) mg/L	Metal	0.01
22.	Lead (as Pb) mg/L	Metal	0.01
23.	Zinc (as Zn) mg/L	Metal	3.0
24.	Chromium (as Cr) mg/L	Metal	0.05
25.	Cyanide (as CN) mg/L	Non Metal	0.07
26.	Anionic Detergents (as MBAS) mg/L	Non Metal	-
27.	Phenolic compounds mg/L	Non Metal	-
28.	Polynuclear aromatic hydrocarbons (PAH) mic g/L	Non Metal	-
29.	Mineral oil mg/L	Non Metal	-
30.	Pesticides mg/L	Non Metal	-
31.	Free Chlorine mg/L	Non Metal	5.0
32.	Aluminium mg/L	Metal	0.2
33.	Boron mg/L	Non metal	0.3
34.	Alpha emitters Bq/L	Rad	0.1
35.	Beta emitters Bq/L	Rad	1
36.	Fecal Coliform Counts/mL	Bact.	Nil
37.	Protozoa	Biological	Nil
38.	Helminths	Biological	Nil
39.	Free living organisms	Biological	Nil