

## Water Quality Standards (as per IS: 2296)

Class A – Drinking water without conventional treatment but after disinfection.

Class B – Water for outdoor bathing.

Class C – Drinking water with conventional treatment followed by disinfection.

Class D – Water for fish culture and wild life propagation.

Class E – Water for irrigation, industrial cooling and controlled waste disposal.

(Unobj = Unobjectionable).

	Parameter and Unit	A	B	C	D	E
1	Taste	None	--	--	--	--
2	Odour	Unobj	--	--	--	--
3	Colour (True) (Hazen unit)	10	300	300	--	--
4	pH (max) (min : 6.5)	8.5	8.5	8.5	8.5	8.5
5	Conductivity (25oC) uS/cm	--	--	--	1000	2250
6	DO (mg/L) (minimum)	6	5	4	4	--
7	BOD (3d, 27oC) (mg/L)	2	3	3	--	--
8	Total Coliforms (MPN/100 mL)	50	500	5000	--	--
9	TDS (mg/L)	500	--	1500	--	2100
10	Oil and Grease (mg/L)	--	--	0.1	0.1	--
11	Mineral oil (mg/L)	0.01	--	--	--	--
12	Total Hardness (mg/L as CaCO <sub>3</sub> )	300	--	--	--	--
13	Chlorides (mg/L as Cl)	250	--	600	--	600
14	Sulfates (mg/L as SO <sub>4</sub> )	400	--	400	--	1000
15	Nitrates (mg/L as NO <sub>3</sub> )	20	--	50	--	--
16	Free CO <sub>2</sub> (mg/L)	--	--	--	6	--
17	Free NH <sub>3</sub> (mg/L as N)	--	--	--	1.2	--
18	Fluorides (mg/L as F)	1.5	1.5	1.5	--	--
19	Calcium (mg/L)	80.10	--	--	--	--
20	Magnesium (mg/L)	24.28	--	--	--	--
21	Copper (mg/L)	1.5	--	1.5	--	--
22	Iron (mg/L)	0.3	--	50	--	--
23	Manganese (mg/L)	0.5	--	--	--	--
24	Zinc (mg/L)	15	--	15	--	--
25	Boron (mg/L as B)	--	--	--	--	2
26	Barium (mg/L)	1	--	--	--	--
27	Silver (mg/L)	0.05	--	--	--	--
28	Arsenic Total (mg/L)	0.05	0.2	0.2	--	--
29	Mercury (mg/L)	0.001	--	--	--	--
30	Lead (mg/L)	0.1	--	0.1	--	--
31	Cadmium (mg/L)	0.01	--	0.01	--	--
32	Chromium (VI) (mg/L)	0.05	0.05	0.05	--	--
33	Selenium (mg/L)	0.01	--	0.05	--	--
34	Cyanide (mg/L as CN)	0.05	0.05	0.05	--	--
35	Phenols (mg/L)	0.002	0.005	0.005	--	--
36	Anionic detergents (mg/L as MBAS)	0.2	1	1	--	--
37	PAH (mg/L)	0.2	--	--	--	--
38	Pesticides (ug/L)	0	--	--	--	--

39	Insecticides (ug/L)	--	--	0	--	--
40	Alpha emitters (10 <sup>-6</sup> uCi/mL)	0.001	0.001	0.001	0.001	0.001
41	Beta emitters (10 <sup>-6</sup> uCi/mL)	0.01	0.01	0.01	0.01	0.01
42	Percent Sodium (%)	--	--	--	--	60
43	Sodium Absorption Ratio	--	--	--	--	26

### Drinking Water Quality Standards (IS: 10500)

[\* represents essential characteristics of drinking water)

Sl	Parameters and Units	Standards
1	Color (True) (Hazen Units)	5 *
2	Taste	Agreeable *
3	Odour	Unobjectionable *
4	Turbidity (NTU)	5 *
5	PH	6.5- 8.5 *
6	Total Coliforms (MPN/100 mL)	0
7	TDS (mg/L)	500
8	Mineral Oil (mg/L)	0.01
9	Total Hardness (mg/L as CaCO <sub>3</sub> )	300
10	Alkalinity ( mg/L as CaCO <sub>3</sub> )	200
11	Chlorides( mg/L as Cl)	250
12	Sulfates (mg/L as SO <sub>4</sub> )	200
13	Nitrates (mg/L as NO <sub>3</sub> )	45
14	Free Residual Chlorine(mg/L)	0.2
15	Fluorides(mg/L as F)	1
16	Calcium(mg/L as Ca)	75
17	Copper (mg/L as Cu)	0.05 *
18	Iron (mg/L as Fe)	0.3 *
19	Manganese (mg/L as Mn)	0.1
20	Zinc (mg/L as Zn)	5
21	Boron (mg/L as B)	1
22	Aluminum (mg/L as Al)	0.03
23	Arsenic ( Total ) (mg/L as As)	0.05
24	Mercury (mg/L as Hg)	0.001
25	Lead (mg/L as Pb)	0.05
26	Cadmium (mg/L as Cd)	0.01
27	Chromium (mg/L as Cr)	0.05
28	Selenium (mg/L as Se)	0.01
29	Cyanide(mg/L as Cn)	0.05
30	Phenolic Compounds (mg/L as C <sub>6</sub> H <sub>5</sub> OH)	0.001
31	Anionic Detergents (mg/L as MBAS)	0.2
32	PAH (mg/L)	0
33	Pesticides (ug/L)(ug/L)	0
34	Alpha Emitters (10 <sup>-6</sup> uCi/mL)	0.0001
35	Beta Emitters (10 <sup>-6</sup> uCi/mL)	0.001
36	Pathogenic Organisms or Virus	0