

RIVER CHAPORA NEAR ALORNA FORT, PERNEM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	29	30	30	27	27	28	28	28	28	28	26	29	
2	Dissolved Oxygen(mg/l)	6.8	6.9	6.0	6.6	8.2	7.7	7.2	4.0	7.8	8.5	7.6	7.2	4 mg/l or more
3	pH	6.8	7.3	7.5	7.5	6.5	6.1	7.21	7.1	6.6	7.1	6.9	6.8	6-9
4	Conductivity(us/cm)	3497	139	3657	67	27	48	64	62	2466	165	1448	786	
5	BOD(mg/l)	BDL	2.0	BDL	BDL	BDL	BDL	2.6	BDL	2.1	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.086	BDL	0.17	0.16	0.18	0.11	BDL	0.14	0.14	0.13	0.26	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.06	BDL	0.006	BDL	0.02	BDL	BDL	0.006	0.047	BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	2400	490	2300	4900	3300	1300	2300	1700	2300	4900	1300	1700	
9	Total Coliform(MPN/100ml)	5400	790	4900	7000	7900	2300	4900	3300	3300	7900	2300	2200	5000 or less MPN/100 ml
10	Fecal Streptococci(MPN/100ml)	-	-	-	-	-	-	-	71	71	220	131	357	
11	Turbidity(NTU)	3.45	4.05	2.64	5.17	62.75	17.87	43.5	3.69	4.38	4.20	2.63	2.57	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	56.0	32.0	44.0	34.0	24.0	26.0	40.0	30.0	46.0	32.0	48.0	34.0	
14	Chlorides(mg/l)	1599.0	53.4	1650.0	18.0	13.0	5.0	8.9	2.91	646.0	-	386.0	197.1	
15	COD(mg/l)	10.0	7.0	4.0	4.0	14.0	6.0	8.0	4.0	4.0	4.0	4.0	10.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	5.04	-	-	-	-	-	
17	Ammonia (mg/l)	0.014	0.09	0.08	BDL	BDL	BDL		BDL	0.06	0.06	BDL	0.1	
18	Total Hardness(mg/l)	136.0	20.0	420.0	20.0	12.0	20.0	18.0	20.0	248.0	162.0	148.0	86.0	
19	Calcium(mg/l)	32.06	12.0	28.1	4.81	3.0	6.0	16.0	4.8	22.0	13.63	10.0	22.0	
20	Magnesium(mg/l)	13.6	BDL	85.1	BDL	2.0	BDL	BDL	BDL	47.0	31.1	30.0	15.6	
21	Sulphate(mg/l)	133.69	9.74	198.0	3.84	13.0	5.0	8.05	2.87	6.0	-	20.0	36.59	
22	Sodium(mg/l)	579.1	32.8	5.6	9.0	-	-	12.1	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	2374.0	83.0	2151.0	40.0	18.0	29.0	39.0	42.0	1486.0	98.0	863.0	480.0	
24	Total Fixed Solids(mg/l)	1263.0	58.0	2114.0	32.0	10.0	14.0	20.0	25.0	756.0	76.0	604.0	271.0	
25	Total Suspended Solids(mg/l)	12.0	10.0	11.0	40.0	55.0	36.0	13.0	12.0	51.0	8.0	47.0	21.0	
26	Phosphate(mg/l)	0.052	1.11	0.07	0.15	0.06	0.02	0.06	0.52	BDL	BDL	0.22	0.03	
27	Boron(mg/l)	1.17	1.58	4.38	0.53	0.22	-	0.98	-	-	-	-	-	
28	Potassium(mg/l)	28.3	3.1	0.2	0.9	-	-	1.9	-	-	-	-	-	
29	Flouride(mg/l)	BDL	-	BDL	BDL	BDL	BDL	BDL	BDL	0.77	0.9	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.016	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	1.312	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.076	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.046	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.29	-	-	-	-	-	0.035	-	-	-	-	-	
37	IronTotal(mg/l)	1.04	-	-	-	-	-	0.566	-	-	-	-	-	

RIVER KALNA AT CHANDEL, PERNEM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	29	30	29	27	27	28	27	28	27	28	26	28	
2	Dissolved Oxygen(mg/l)	6.6	6.3	6.1	7.1	8.0	7.3	8.1	7.9	7.6	8.0	7.5	7.1	4 mg/l or more
3	pH	6.5	7.2	6.8	6.8	6.4	6.7	6.9	7.0	7.0	7.2	6.9	6.8	6-9
4	Conductivity(µs/cm)	77	60	70	156	18	4601	67	64	74	50	95	93	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	BDL	0.11	BDL	BDL	BDL	BDL	0.74	BDL	0.17	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	0.006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	450	1300	1100	1300	3300	2300	3300	2300	2300	230	1300	1300	
9	Total Coliform(MPN/100ml)	780	4900	3300	4600	4900	4900	7000	4900	4900	330	3300	2300	5000 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	>1601	1601	220	32	351	
11	Turbidity(NTU)	2.71	2.21	2.13	4.85	19.42	12.64	3.69	2.13	2.01	1.99	1.87	2.56	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	36.0	40.0	18.0	34.0	32.0	34.0	50.0	36.0	24.0	36.0	56.0	36.0	
14	Chlorides(mg/l)	12.0	24.7	45.0	46.0	7.0	5.0	10.8	3.88	9.0	9.5	10.0	9.86	
15	COD(mg/l)	6.0	4.0	4.0	4.0	12.0	4.0	4.0	BDL	4.0	4.0	4.0	9.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	5.32	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	0.27	0.12	BDL	BDL	BDL	-	BDL	BDL	BDL	BDL	0.09	
18	Total Hardness(mg/l)	28.0	14.0	88.0	38.0	22.0	22.0	24.0	24.0	36.0	36.0	50.0	44.0	
19	Calcium(mg/l)	8.02	10.0	8.82	6.41	5.0	7.0	20.0	6.0	10.0	8.82	5.0	20.0	
20	Magnesium(mg/l)	BDL	BDL	16.0	5.3	4.0	BDL	BDL	BDL	3.0	3.4	9.0	5.8	
21	Sulphate(mg/l)	10.9	10.64	16.8	9.0	2.0	2.0	3.13	2.6	3.0	7.47	BDL	5.85	
22	Sodium(mg/l)	16.9	10	4.9	29.3	-	-	10.6	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	44.0	38.0	43.0	93.0	12.0	27.0	42.0	43.0	46.0	30.0	57.0	58.0	
24	Total Fixed Solids(mg/l)	33.0	26.0	32.0	80.0	7.0	15.0	27.0	22.0	21.0	20.0	31.0	34.0	
25	Total Suspended Solids(mg/l)	5.0	8.0	11.0	53.0	58.0	29.0	9.0	4.0	33.0	8.0	27.0	13.0	
26	Phosphate(mg/l)	0.119	0.82	0.16	0.15	0.02	BDL	BDL	0.53	0.20	0.03	0.02	0.06	
27	Boron(mg/l)	0.62	1.24	4.18	0.67	BDL	-	0.97	-	-	-	-	-	
28	Potassium(mg/l)	2.2	1.7	0.1	2.0	-	-	5.2	-	-	-	-	-	
29	Flouride(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.92	0.97	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.030	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	1.685	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.219	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.054	-	-	-	-	-	
37	IronTotal(mg/l)	0.380	-	-	-	-	-	0.240	-	-	-	-	-	

RIVER MAPUSA ON CULVERT ON HIGHWAY MAPUSA-PANAJI 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	31	29	27	27	29	29	29	29	29	27	30	
2	Dissolved Oxygen(mg/l)	3.9	4.9	9.3	6.3	5.9	4.8	3.7	-	4.5	3.5	5.0	7.1	4 mg/l or more
3	pH	7.0	7.2	7.4	7.4	7.5	6.3	6.6	6.7	7.0	6.6	6.8	6.8	6.5 - 8.5
4	Conductivity(us/cm)	5518	2508	11180	144	87	198	457	669	2104	656	552	93	
5	BOD(mg/l)	5.0	2.0	BDL	2.6	BDL	2.6	BDL	-	2.2	BDL	2.8	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.73	1.0	0.65	BDL	0.34	0.32	BDL	0.49	0.69	BDL	0.34	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.019	BDL	BDL	0.055	BDL	BDL	BDL	0.09	0.006	0.014	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	4900	490	7900	11000	7000	4900	4900	7900	7900	7900	7000	1300	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	7000	790	13000	22000	11000	7900	11000	17000	17000	13000	11000	2300	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	>1601	>1601	350	541	921	
11	Turbidity(NTU)	5.25	14.38	5.67	39.1	50.0	26.2	4.3	5.64	2.88	3.99	4.13	2.56	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	12	BDL	BDL	BDL	BDL	BDL	2.0	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	84.0	136.0	88.0	32.0	34.0	38.0	60.0	52.0	48.0	64.0	48.0	36.0	
14	Chlorides(mg/l)	1899.0	2064.1	5048.0	39.0	13.0	35.0	107.9	126.0	431.0	2549.0	125.0	9.86	
15	COD(mg/l)	18.0	-	-	6.0	20.0	8.0	10.0	10.0	8.0	-	6.0	9.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	4.48	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	BDL	BDL	0.06	BDL	BDL	-	BDL	0.07	0.32	0.06	0.09	
18	Total Hardness(mg/l)	540.0	238.0	362.0	32.0	56.0	56.0	62.0	84.0	202.0	66.0	80.0	44.0	
19	Calcium(mg/l)	160.2	112.0	120.24	8.82	12.0	17.0	40.0	15.0	30.0	5.61	9.0	20.0	
20	Magnesium(mg/l)	34.0	30.6	15.1	2.4	6.0	3.0	5.3	11.0	31.0	12.6	14.0	5.8	
21	Sulphate(mg/l)	360.0	47.6	2637.4	33.1	6.0	18.0	23.98	34.0	19.0	638.3	17.0	5.85	
22	Sodium(mg/l)	841.6	479.0	80.0	26.1	-	-	59.2	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	3159.0	1436.0	6794.0	90.0	55.0	119.0	280.0	455.0	1306.0	397.0	325.0	58.0	
24	Total Fixed Solids(mg/l)	2422.0	947.0	6687.0	75.0	28.0	56.0	178.0	252.0	700.0	375.5	169.0	34.0	
25	Total Suspended Solids(mg/l)	16.0	24.0	6.0	18.0	38.0	42.0	59.0	19.0	44.0	9.0	50.0	13.0	
26	Phosphate(mg/l)	0.246	0.66	0.08	0.19	0.07	0.03	-	0.53	0.03	0.07	0.13	0.06	
27	Boron(mg/l)	1.35	2.73	3.04	0.76	BDL	-	0.99	-	-	-	-	-	
28	Potassium(mg/l)	46.7	30.6	16.9	4.2	-	-	5.2	-	-	-	-	-	
29	Flouride(mg/l)	BDL	-	2.45	BDL	BDL	BDL	BDL	0.43	0.2	2.31	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	1.094	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.158	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.010	-	-	-	-	-	
37	IronTotal(mg/l)	BDL	-	-	-	-	-	0.217	-	-	-	-	-	

RIVER ASSANORA AT ASSANORA 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	31	27	27	28	28	30	31	31	30	30	29	
2	Dissolved Oxygen(mg/l)	7.4	7.2	7.9	7.0	6.4	7.4	6.2	6.5	7.3	7.2	6.7	6.5	4 mg/l or more
3	pH	6.8	7.0	6.1	6.3	6.8	6.2	7.36	6.9	6.9	6.5	6.9	6.5	6-9
4	Conductivity(µs/cm)	64	54	84	58	45	78	65	90	91	67	72	127	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.6	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.26	0.16	0.15	0.13	BDL	BDL	BDL	0.16	0.17	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.008	BDL	0.006	0.02	BDL	BDL	0.09	BDL	0.006	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	190	330	-	-	1300	110	330	1300	2300	1300	1700	1700	
9	Total Coliform(MPN/100ml)	1700	1300	-	-	2400	330	2400	2200	3300	2300	2200	2200	5000 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	221	95	1601	70	1601	351	
11	Turbidity(NTU)	3.03	3.45	21.3	20.3	38.9	5.01	5.37	16.66	BDL	4.6	6.78	2.29	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	10.0	40.0	22.0	22.0	38.0	22.0	26.0	30.0	42.0	22.0	22.0	28.0	
14	Chlorides(mg/l)	-	20.5	7.34	6.85	7.34	13.6	4.4	5.83	7.34	29.0	8.7	10.3	
15	COD(mg/l)	BDL	12.0	3.0	4.0	4.0	8.0	4.0	6.0	8.0	BDL	BDL	7.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	4.76	-	-	-	-	-	
17	Ammonia (mg/l)	0.09	BDL	BDL	BDL	0.05	0.05		0.03	0.11	0.08	0.08	0.08	
18	Total Hardness(mg/l)	22.0	30.0	22.0	26.0	26.0	16.0	10.0	40.0	18.0	18.0	22.0	26.0	
19	Calcium(mg/l)	4.01	9.62	5.61	5.61	6.0	4.0	3.2	20.0	5.6	5.0	BDL	12.0	
20	Magnesium(mg/l)	2.92	BDL	BDL	2.92	3.0	BDL	BDL	4.9	BDL	BDL	4.0	3.4	
21	Sulphate(mg/l)	3.01	BDL	2.84	3.59	24.0	3.8	3.23	3.42	3.55	4.0	4.6	6.8	
22	Sodium(mg/l)	6.3	17.0	0.6	2.2	-	-	39.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	36.0	30.0	50.0	36.0	27.0	52.0	47.0	55.4	55.0	42.0	49.0	82.0	
24	Total Fixed Solids(mg/l)	28.0	23.0	28.0	20.0	13.0	16.0	32.0	30.4	22.0	25.0	28.0	54.0	
25	Total Suspended Solids(mg/l)	6.0	23.0	13.0	12.0	57.0	14.0	7.0	29.0	13.0	5.0	6.0	23.0	
26	Phosphate(mg/l)	0.27	BDL	0.04	0.05	0.06	0.02	0.086	0.06	BDL	BDL	BDL	0.02	
27	Boron(mg/l)	1.81	1.42	BDL	BDL	-	-	0.97	-	-	-	-	-	
28	Potassium(mg/l)	8.2	3.1	0.2	BDL	-	-	0.87	-	-	-	-	-	
29	Flouride(mg/l)	-	-	0.02	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.014	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.92	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.287	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.021	-	-	-	-	-	
37	IronTotal(mg/l)	1.47	-	-	-	-	-	0.154	-	-	-	-	-	

RIVER VALVANTI AT SANQUELIM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	29	29	27	27	28	29	30	31	31	30	30	29	
2	Dissolved Oxygen(mg/l)	7.6	8.0	8.7	7.5	8.6	7.6	7.5	7.4	7.2	8.1	8.4	7.0	4 mg/l or more
3	pH	7.1	6.5	6.4	6.3	7.0	6.6	7.3	6.9	6.9	6.9	7.0	6.7	6-9
4	Conductivity(µs/cm)	56	64	56	50	44	42	53	61	77	61	61	79	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.0	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.26	0.11	0.15	0.12	0.12	BDL	0.12	0.13	0.16	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.05	BDL	0.02	BDL	BDL	BDL	0.055	BDL	BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	1300	1100	-	-	3500	790	1700	1700	2300	2100	2200	1300	
9	Total Coliform(MPN/100ml)	3300	3500	-	-	5400	2400	5400	2700	4900	2600	4900	2300	5000 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	1601	171	351	40	24	71	
11	Turbidity(NTU)	2.99	3.96	65.0	73.0	2.07	3.84	2.32	1.0	BDL	BDL	1.78	BDL	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	10.0	38.0	16.0	20.0	38.0	20.0	24.0	10.0	34.0	24.0	26.0	32.0	
14	Chlorides(mg/l)	7.5	8.0	6.85	7.34	6.4	5.8	5.38	4.37	6.85	6.0	6.3	23.2	
15	COD(mg/l)	-	6.0	4.0	4.0	8.0	-	4.0	4.0	8.0	8.0	6.0	8.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	5.32	-	-	-	-	-	
17	Ammonia (mg/l)	0.12	BDL	BDL	0.13	0.08	BDL	-	0.08	BDL	0.16	0.05	0.2	
18	Total Hardness(mg/l)	26.0	44.0	22.0	20.0	24.0	20.0	10.0	40.0	18.0	34.0	10.0	26.0	
19	Calcium(mg/l)	5.61	16.0	4.81	5.61	4.0	4.0	3.2	10.0	5.6	5.0	3.2	12.0	
20	Magnesium(mg/l)	2.92	BDL	2.43	BDL	3.0	2.0	BDL	7.3	BDL	5.0	BDL	3.4	
21	Sulphate(mg/l)	BDL	2.88	3.67	6.02	2.0	5.0	BDL	BDL	BDL	6.0	BDL	4.39	
22	Sodium(mg/l)	4.3	20.1	1.0	1.0	-	-	36.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	35.0	34.0	34.0	30.0	26.0	28.0	36.0	36.9	46.0	43.0	41.0	49.0	
24	Total Fixed Solids(mg/l)	25.0	27.0	16.0	14.0	11.0	9.0	20.0	18.1	20.0	22.0	22.0	27.0	
25	Total Suspended Solids(mg/l)	6.0	16.0	43.0	55.0	26.0	28.0	8.0	16.0	11.0	38.0	5.0	16.0	
26	Phosphate(mg/l)	0.5	BDL	0.08	0.18	0.06	BDL	0.054	0.05	BDL	0.03	0.05	0.02	
27	Boron(mg/l)	1.66	1.15	BDL	BDL	-	-	0.99	-	-	-	-	-	
28	Potassium(mg/l)	1.3	4.0	0.2	0.1	-	-	0.7	-	-	-	-	-	
29	Flouride(mg/l)	-	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.24	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.019	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.36	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.201	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.063	-	-	-	-	-	
37	IronTotal(mg/l)	0.12	-	-	-	-	-	BDL	-	-	-	-	-	

RIVER MADEI AT DABOSE, VALPOI 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	30	28	27	29	28	30	30	30	31	30	30	
2	Dissolved Oxygen(mg/l)	7.2	7.0	8.6	8.0	8.3	6.9	7.6	7.5	7.3	7.5	7.9	7.4	4 mg/l or more
3	pH	7.01	6.7	6.5	6.4	7.4	8.5	7.36	6.9	6.8	7.1	7.0	7.0	6-9
4	Conductivity(µs/cm)	126.4	118.6	64	41	58	56	58.7	80	91	98	91	297	
5	BOD(mg/l)	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.3	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.16	0.47	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.12	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.026	BDL	0.03	BDL	BDL	BDL	0.062	BDL	BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	1300	700	-	700	490	490	1100	2300	2200	1300	1400	220	
9	Total Coliform(MPN/100ml)	2100	2200	-	1700	1300	1300	3500	3300	2700	1700	2700	270	5000 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	1601	151	71	170	59	1601	
11	Turbidity(NTU)	3.5	2.78	140	150	1.92	8.47	3.47	BDL	BDL	BDL	1.37	1.05	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	22.0	28.0	18.0	20.0	42.0	30.0	28.0	44.0	44.0	34.0	40.0	52.0	
14	Chlorides(mg/l)	13.5	13.5	12.0	3.91	7.34	5.8	4.4	4.37	7.34	6.0	6.3	49.8	
15	COD(mg/l)	6.0	8.0	6.0	6.0	4.0	6.0	6.0	8.0	6.0	BDL	4.0	10.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	5.32	-	-	-	-	-	
17	Ammonia (mg/l)	0.07	0.07	BDL	BDL	BDL	BDL	-	0.18	BDL	0.06	0.09	0.13	
18	Total Hardness(mg/l)	54.0	28.0	32.0	18.0	28.0	14.0	14.0	38.0	28.0	32.0	36.0	52.0	
19	Calcium(mg/l)	12.2	9.62	5.61	4.01	6.0	3.0	4.8	20.0	8.0	6.0	8.0	28.0	
20	Magnesium(mg/l)	5.83	BDL	4.37	BDL	3.0	BDL	BDL	4.4	BDL	4.0	4.0	5.8	
21	Sulphate(mg/l)	3.4	BDL	BDL	5.36	2.0	4.8	5.33	5.64	5.77	4.0	BDL	15.58	
22	Sodium(mg/l)	8.1	16.2	24.3	3.1	-	-	48.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	71.0	64.0	42.0	25.0	33.0	37.0	41.0	49.3	51.0	69.0	62.0	181.0	
24	Total Fixed Solids(mg/l)	56.0	55.0	22.0	10.0	19.0	11.0	27.0	31.0	18.0	40.0	35.0	149.0	
25	Total Suspended Solids(mg/l)	11.0	14.0	81.0	78.0	22.0	22.0	12.0	22.0	18.0	31.0	12.0	26.0	
26	Phosphate(mg/l)	0.26	BDL	0.34	0.19	BDL	0.02	0.052	0.08	0.1	BDL	0.02	BDL	
27	Boron(mg/l)	1.94	1.68	BDL	BDL	-	-	0.97	-	-	-	-	-	
28	Potassium(mg/l)	2.0	6.1	1.2	BDL	-	-	1.0	-	-	-	-	-	
29	Flouride(mg/l)	-	-	BDL	BDL	BDL	BDL	BDL	BDL	1.55	BDL	0.24	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.016	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	1.4	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.052	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.325	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.114	-	-	-	-	-	
37	IronTotal(mg/l)	0.15	-	-	-	-	-	0.273	-	-	-	-	-	

RIVER KHANDEPAR, OPA, PONDA 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	30	30	27	28	29	27	29	30	30	30	27	
2	Dissolved Oxygen(mg/l)	7.1	6.7	6.1	7.1	7.2	7.1	7.4	7.0	7.0	7.3	7.0	7.1	4 mg/l or more
3	pH	7.7	6.9	7.4	7.1	6.7	6.9	6.0	7.2	7.2	7.3	7.0	7.0	6-9
4	Conductivity(us/cm)	124	90	1132	104	51	75	61.27	63	67	127	90	101	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.12	0.11	0.12	0.12	BDL	BDL	BDL	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	BDL	0.01	0.01	BDL	BDL	BDL	0.007	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	78	130	700	790	1300	490	300	1700	1700	1100	1400	130	
9	Total Coliform(MPN/100ml)	220	330	1400	1300	1700	1300	700	2200	3300	1700	1700	230	5000 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	541	95	34	5	34	
11	Turbidity(NTU)	BDL	1.67	3.23	6.88	15.38	21.3	1.33	2.58	1.39	1.58	BDL	1.53	
12	Phenolphthalein Alkalinity(mg/l)	10.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	18.0	64.0	54.0	54.0	30.0	20.0	32.0	52.0	42.0	52.0	36.0	54.0	
14	Chlorides(mg/l)	12.14	17.5	22.0	29.0	5.3	10.5	10.0	12.63	7.5	15.17	8.5	10.27	
15	COD(mg/l)	5.0	6.0	4.0	BDL	4.0	4.0	4.0	4.0	BDL	6.0	4.0	6.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	4.04	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	BDL	BDL	0.06	0.06	BDL	-	BDL	BDL	0.09	BDL	BDL	
18	Total Hardness(mg/l)	54.0	52.0	50.0	24.0	14.0	14.0	22.0	48.0	30.0	36.0	16.0	34.0	
19	Calcium(mg/l)	36.0	13.6	10.0	4.0	4.0	3.21	4.81	30.0	6.41	7.2	6.41	11.2	
20	Magnesium(mg/l)	4.4	4.4	6.0	3.0	BDL	BDL	2.4	4.4	3.4	4.37	2.0	BDL	
21	Sulphate(mg/l)	5.97	3.23	4.7	7.4	2.37	6.94	BDL	4.82	BDL	5.93	BDL	5.84	
22	Sodium(mg/l)	9.4	9.8	14.2	23.5	-	-	11.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	72.0	52.0	79.0	71.0	32.0	45.0	37.0	38.9	40.0	78.0	55.0	61.0	
24	Total Fixed Solids(mg/l)	37.0	49.0	47.0	28.0	13.0	35.0	30.0	31.0	34.0	61.0	43.0	33.0	
25	Total Suspended Solids(mg/l)	13.0	18.0	11.0	29.0	34.0	9.0	9.0	9.0	6.0	26.0	5.0	15.0	
26	Phosphate(mg/l)	0.63	0.07	0.07	0.39	0.05	0.06	BDL	0.09	0.04	BDL	BDL	0.11	
27	Boron(mg/l)	0.83	1.46	-	-	-	-	1.01	-	-	-	-	-	
28	Potassium(mg/l)	3.9	2.9	0.4	0.3	-	-	1.8	-	-	-	-	-	
29	Flouride(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.3	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.800	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.103	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.1	-	-	-	-	-	BDL	-	-	-	-	-	
37	IronTotal(mg/l)	0.06	-	-	-	-	-	BDL	-	-	-	-	-	

RIVER KHANDEPAR AT CODLI 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	30	31	27	28	29	27	29	30	29	30	27	
2	Dissolved Oxygen(mg/l)	6.9	7.2	7.0	7.4	7.2	7.2	7.3	7.5	7.8	7.4	7.6	7.3	4 mg/l or more
3	pH	6.6	6.8	7.4	7.1	6.8	7.1	6.51	7.1	7.1	7.3	7.3	7.4	6-9
4	Conductivity(µs/cm)	104	129	1013	37	39	57	146	58	70	74	77	155	
5	BOD(mg/l)	2.2	BDL	BDL	BDL	2.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.16	0.12	0.12	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	110	790	230	790	790	490	700	2200	1300	1700	1300	230	
9	Total Coliform(MPN/100ml)	260	1100	490	2200	1400	1100	1100	3300	2200	2200	1700	490	5000 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	351	71	541	50	351	
11	Turbidity(NTU)	1.75	7.95	1.0	6.73	4.18	7.54	2.93	2.77	1.97	1.92	1.23	1.46	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	18.0	60.0	58.0	58.0	24.0	22.0	28.0	44.0	34.0	44.0	38.0	46.0	
14	Chlorides(mg/l)	17.97	8.5	43.0	7.0	4.9	6.0	16.5	13.11	9.0	3.91	8.0	9.78	
15	COD(mg/l)	7.0	8.0	6.0	-	4.0	4.0	4.0	6.0	-	6.0	4.0	8.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	7.0	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	BDL	BDL	0.06	BDL	BDL	-	BDL	0.06	BDL	BDL	BDL	
18	Total Hardness(mg/l)	42.0	40.0	38.0	14.0	14.0	16.0	16.0	40.0	32.0	32.0	14.0	44.0	
19	Calcium(mg/l)	24.0	9.62	10.0	3.0	4.0	4.0	4.01	28.0	7.21	6.0	5.61	14.4	
20	Magnesium(mg/l)	4.4	3.9	3.0	BDL	BDL	1.46	BDL	2.9	3.4	3.89	2.0	BDL	
21	Sulphate(mg/l)	3.87	2.63	4.0	3.6	BDL	2.78	2.09	3.61	BDL	4.71	BDL	5.3	
22	Sodium(mg/l)	5.2	0.4	15.9	3.4	-	-	35	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	58.0	74.9	71.0	24.0	24.0	33.0	87.0	35.96	46.0	46.0	46.0	91.0	
24	Total Fixed Solids(mg/l)	29.0	69.0	43.0	10.0	10.0	27.0	78.0	28.72	41.0	30.0	40.0	58.0	
25	Total Suspended Solids(mg/l)	16.0	19.0	9.0	23.0	22.0	8.0	12.0	8.0	38.0	35.0	10.0	18.0	
26	Phosphate(mg/l)	0.54	0.05	0.15	0.09	0.03	0.07	0.02	0.1	BDL	BDL	0.02	0.2	
27	Boron(mg/l)	0.19	1.46	-	-	-	-	1.76	-	-	-	-	-	
28	Potassium(mg/l)	0.9	0.9	0.2	0.1	-	-	1.1	-	-	-	-	-	
29	Flouride(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	0.81	BDL	BDL	BDL	BDL	0.26	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.765	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.27	-	-	-	-	-	BDL	-	-	-	-	-	
37	IronTotal(mg/l)	0.08	-	-	-	-	-	0.439	-	-	-	-	-	

RIVER KUSHAWATI NEAR BUND AT KEVONA, RIVONA, SANGUEM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	35	37	27	27	27	27	28	31	30	31	30	30	
2	Dissolved Oxygen(mg/l)	7.0	8.3	6.8	5.1	6.0	6.8	7.2	8.0	6.3	7.2	7.5	7.2	4 mg/l or more
3	pH	7.5	6.8	7.2	6.6	6.4	6.9	7.4	6.7	6.6	7.3	7.2	7.1	6-9
4	Conductivity(µs/cm)	206	173	55	23	78	65	52	73	93	105	126	177	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.6	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.12	BDL	BDL	0.15	BDL	0.11	0.12	BDL	BDL	BDL	0.23	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.029	0.01	BDL	BDL	0.007	BDL	BDL	0.021	BDL	BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	790	330	-	790	2300	780	1700	2300	2300	1700	2200	2300	
9	Total Coliform(MPN/100ml)	1300	790	-	1700	4900	1300	3300	4900	4900	3300	2700	3300	5000 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	47	431	221	35	351	221	
11	Turbidity(NTU)	1.5	0.86	2.03	92.9	5.47	3.84	4.37	1.68	1.1	1.12	1.53	1.19	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	30.0	112.0	20.0	16.0	30.0	28.0	24.0	42.0	44.0	40.0	58.0	68.0	
14	Chlorides(mg/l)	15.65	4.4	9.23	11.2	18.0	9.0	4.86	7.0	10.4	12.0	6.36	8.0	
15	COD(mg/l)	4.0	6.0	5.0	9.0	BDL	6.0	4.0	BDL	8.0	4.0	BDL	4.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	5.04	-	-	-	-	-	
17	Ammonia (mg/l)	0.05	0.06	BDL	0.03	0.08	0.06	-	BDL	0.18	0.11	BDL	BDL	
18	Total Hardness(mg/l)	96.0	104.0	16.0	12.0	16.0	48.0	20.0	22.0	44.0	38.0	50.0	74.0	
19	Calcium(mg/l)	21.64	22.4	12.0	10.0	2.4	8.0	3.0	6.41	20.0	12.02	10.4	16.0	
20	Magnesium(mg/l)	10.21	11.7	BDL	BDL	2.4	7.0	3.0	BDL	5.8	BDL	5.83	8.0	
21	Sulphate(mg/l)	BDL	2.3	3.01	16.6	4.43	20.0	2.56	2.82	3.94	4.48	BDL	BDL	
22	Sodium(mg/l)	9.1	4.0	4.3	4.6	-	-	16.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	128.0	120.0	32.0	17.0	49.0	37.0	33.0	46.0	57.0	60.0	85.0	108.0	
24	Total Fixed Solids(mg/l)	71.0	80.0	14.0	8.0	40.0	19.3	18.0	41.0	26.0	54.0	55.0	78.0	
25	Total Suspended Solids(mg/l)	22.0	10.0	11.0	6.0	10.0	12.0	3.0	12.0	21.0	13.0	8.0	25.0	
26	Phosphate(mg/l)	BDL	0.06	BDL	0.3	0.05	BDL	BDL	BDL	BDL	0.14	BDL	BDL	
27	Boron(mg/l)	0.03	0.3	0.67	0.7	1.25	-	0.97	-	-	-	-	-	
28	Potassium(mg/l)	1.7	1.7	0.7	0.1	-	-	0.54	-	-	-	-	-	
29	Flouride(mg/l)	BDL	0.2	BDL	-	0.48	BDL	BDL	BDL	BDL	1.05	BDL	0.39	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.982	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.347	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.010	-	-	-	-	-	
37	IronTotal(mg/l)	0.66	-	-	-	-	-	0.299	-	-	-	-	-	

RIVER TALPONA AT CANACONA 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	30	27	27	28	27	28	30	30	29	29	29	
2	Dissolved Oxygen(mg/l)	8.2	7.3	6.7	7.2	8.4	7.2	7.6	7.6	7.7	7.6	7.8	7.7	4 mg/l or more
3	pH	6.2	7.2	6.8	6.9	7.8	6.6	7.61	7.0	7.0	7.2	7.1	7.5	6-9
4	Conductivity(µs/cm)	61	66.85	244	-	63	42	62	57	79	70	55	81	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	2.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.11	BDL	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.05	0.007	0.006	BDL	BDL	0.143	0.012	BDL	0.026	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	130	330	-	1700	1300	1100	78	1700	790	1100	1100	780	
9	Total Coliform(MPN/100ml)	330	790	-	9200	2200	3500	130	2200	1300	1400	1700	1300	5000 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	221	221	44	27	23	
11	Turbidity(NTU)	3.76	2.95	12.23	6.69	1.1	5.79	BDL	1.97	1.95	3.99	2.01	12.42	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	14.0	28.0	22.0	24.0	16.0	22.0	32.0	28.0	40.0	36.0	56.0	30.0	
14	Chlorides(mg/l)	57.2	399.3	43.5	42.5	5.4	6.27	10	12	4.37	9.23	18.5	7.8	
15	COD(mg/l)	6.0	4.0	4.0	4.0	9.0	14.0	8.0	6.0	6.0	7.0	20.0	10.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	5.04	-	-	-	-	-	
17	Ammonia (mg/l)	0.09	0.15	0.06	0.06	BDL	BDL	-	BDL	0.36	0.06	BDL	BDL	
18	Total Hardness(mg/l)	28.0	-	26.0	28.0	18.0	12.0	18.0	30.0	36.0	28.0	28.0	28.0	
19	Calcium(mg/l)	5.61	-	4.01	4.81	10.0	2.4	6.41	5.0	16.0	14.0	5.6	6.0	
20	Magnesium(mg/l)	2.04	-	3.9	3.89	BDL	BDL	BDL	4.0	4.9	3.4	3.4	4.0	
21	Sulphate(mg/l)	5.1	55.5	17.3	16.5	2.3	2.94	BDL	4.0	5.55	4.18	BDL	2.1	
22	Sodium(mg/l)	10.4	10.2	4.7	27.3	-	-	9.6	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	34.0	39.0	146.0	143.0	38.0	26.0	37.0	35.0	474.0	45.0	33.0	55.0	
24	Total Fixed Solids(mg/l)	24.0	27.0	118.0	113.0	17.0	21.0	28.0	19.0	212.0	28.0	22.0	20.0	
25	Total Suspended Solids(mg/l)	9.0	6.0	12.0	9.0	15.0	7.0	6.0	30.0	24.0	15.0	6.0	22.0	
26	Phosphate(mg/l)	0.59	0.15	0.04	BDL	0.06	0.06	0.21	BDL	0.22	BDL	BDL	0.22	
27	Boron(mg/l)	BDL	0.74	0.77	0.2	-	1.03	1.01	-	-	-	-	-	
28	Potassium(mg/l)	1.4	1.8	0.4	3.3	-	-	0.38	-	-	-	-	-	
29	Flouride(mg/l)	-	-	BDL	BDL	BDL	BDL	0.31	BDL	BDL	0.82	0.41	0.2	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.017	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.684	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.177	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.31	-	-	-	-	-	0.015	-	-	-	-	-	
37	IronTotal(mg/l)	0.11	-	-	-	-	-	0.266	-	-	-	-	-	

RIVER SAL AT PAZORCONI, CUNCOLIM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	30	27	27	27	30	29	29	29	30	29	28	
2	Dissolved Oxygen(mg/l)	5.1	5.9	5.7	6.7	6.5	6.7	6.8	7.3	5.9	6.5	4.5	5.4	4 mg/l or more
3	pH	6.7	7.0	7.1	7.1	6.4	6.8	7.2	6.8	6.8	6.5	6.7	7.3	6.5 - 8.5
4	Conductivity(µs/cm)	91	-	165	163	68	99	267	77	-	86	82	250	
5	BOD(mg/l)	BDL	BDL	BDL	2.2	BDL	2.1	BDL	2.2	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.28	0.19	0.20	0.23	0.32	BDL	0.54	0.36	BDL	0.41	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	0.009	0.008	0.007	BDL	BDL	0.016	0.009	BDL	0.01	BDL	
8	Fecal Coliform(MPN/100ml)	780	2200	-	790	790	490	790	4900	3300	4900	3300	1700	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	1300	7000	-	1700	2400	1100	1300	7000	4900	9400	4600	3300	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	48	>1601	541	>1601	6	
11	Turbidity(NTU)	5.35	9.54	11.47	7.95	3.94	3.18	3.96	3.33	2.0	3.73	1.87	6.0	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	12.0	28.0	22.0	20.0	24.0	30.0	22.0	32.0	20.0	36.0	28.0	30.0	
14	Chlorides(mg/l)	6.4	499.1	26.0	27.0	10.1	8.9	67.0	12.0	1.94	17.48	11.3	10.5	
15	COD(mg/l)	6.0	4.0	10.0	12.0	14.0	6.0	8.0	10.0	6.0	9.0	6.0	4.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	5.04	-	-	-	-	-	
17	Ammonia (mg/l)	0.05	0.11	0.08	0.08	BDL	BDL	-	0.14	0.07	0.05	BDL	BDL	
18	Total Hardness(mg/l)	22.0	2500.0	24.0	26.0	16.0	24.0	54.0	34.0	24.0	44.0	22.0	24.0	
19	Calcium(mg/l)	5.61	400.8	4.01	5.61	3.21	14.0	7.21	5.0	16.0	16.0	3.2	4.81	
20	Magnesium(mg/l)	2.04	364.5	3.4	2.92	BDL	2.4	8.7	5.0	1.9	6.8	3.4	2.91	
21	Sulphate(mg/l)	7.6	39.5	14.4	13.6	7.8	5.7	13.06	86.0	4.25	10.37	5.7	5.38	
22	Sodium(mg/l)	7.0	13.2	5.6	16.1	-	-	66	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	55.0	55.0	97.0	98.0	41.0	56.0	160.0	47.0	487.2	52.0	53.0	138.0	
24	Total Fixed Solids(mg/l)	31.0	39.0	77.0	81.0	33.0	28.0	150.0	26.0	234.0	33.0	33.0	125.0	
25	Total Suspended Solids(mg/l)	35.0	18.0	14.0	11.0	9.0	12.0	19.0	55.0	26.0	26.0	10.0	10.0	
26	Phosphate(mg/l)	0.15	0.04	0.96	1.02	0.17	0.16	0.039	0.02	0.23	0.02	0.05	BDL	
27	Boron(mg/l)	BDL	1.06	0.72	-	0.97	-	0.96	-	-	-	-	-	
28	Potassium(mg/l)	1.4	2.8	0.9	0.7	-	-	2.2	-	-	-	-	-	
29	Flouride(mg/l)	-	-	BDL	BDL	BDL	BDL	2.69	BDL	BDL	0.38	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.011	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.050	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.049	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.019	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
37	IronTotal(mg/l)	BDL	-	-	-	-	-	0.125	-	-	-	-	-	

RIVER SAL AT MOBOR 2019-2020

Sr. No		Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	30	28	28	30	30	29	30	30	29	30	29	
2	Dissolved Oxygen(mg/l)	5.4	6.4	5.1	5.7	6.7	7.2	5.1	5.5	6.2	6.0	5.3	4.9	4 mg/l or more
3	pH	7.75	8.0	6.9	6.8	7.9	7.5	7.7	7.5	7.5	7.9	7.6	7.1	6.5 - 8.5
4	Conductivity(µs/cm)	48510	47800	28200	15390	4810	52590	53810	50090	51600	57020	47710	45360	
5	BOD(mg/l)	BDL	BDL	2.8	BDL	2.5	2.6	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.14	0.02	0.41	0.35	BDL	0.38	BDL	0.07	BDL	BDL	BDL	0.2	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	BDL	0.009	BDL	BDL	0.009	0.103	0.056	0.013	0.02	
8	Fecal Coliform(MPN/100ml)	170	78	-	790	1300	130	790	3300	3300	3300	2200	2100	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	330	230	-	2200	2400	220	1300	4900	7000	4900	4900	4600	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	15	71	541	131	241	>1601	
11	Turbidity(NTU)	1.05	5.27	5.13	5.3	1.1	1.23	1.29	5.3	2.28	6.61	7.49	64.1	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	14	BDL	BDL	BDL	BDL	16	8	14	12	10	BDL	
13	Total Alkalinity(mg/l)	122.0	132.0	46.0	66.0	66.0	64.0	116.0	118.0	102.0	116.0	114.0	118.0	
14	Chlorides(mg/l)	17370.0	18994.11	11355.4	5613.8	2710.2	11246	19119.07	18100.8	20398.0	18786.0	17848.2	19244.0	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	11.48	-	-	-	-	-	
17	Ammonia (mg/l)	0.036	0.21	BDL	0.05	BDL	BDL	-	0.13	BDL	0.09	0.06	0.12	
18	Total Hardness(mg/l)	7800.0	8000.0	140.0	3000.0	1600.0	3800.0	7000.0	5800.0	5800.0	6400.0	9500.0	11000.0	
19	Calcium(mg/l)	2485.0	1002.0	30.5	721.4	800.0	800.6	1603.2	881.8	400.0	561.0	3500.0	561.0	
20	Magnesium(mg/l)	388.8	1336.5	15.6	291.6	194.0	437.4	729.0	874.8	1166.0	1215.0	145.0	2333.0	
21	Sulphate(mg/l)	2037.0	3078.1	244.7	428.1	1074.4	984.6	2617.19	4025.9	2616.0	2709.0	2615.4	940.0	
22	Sodium(mg/l)	8238.0	8780.0	182.0	1680.0	-	-	9230.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	26628.0	32982.0	15510.0	9234.0	2886.0	31554.0	37671.0	30002.0	36120.0	33642.0	30132.0	27150.0	
24	Total Fixed Solids(mg/l)	25617.0	24736.0	14223.0	8978.0	1795.0	28554.0	28126.0	23107.0	21672.0	19872.0	21762.0	13348.0	
25	Total Suspended Solids(mg/l)	70.0	1336.5	11.0	11.0	65.0	70.0	119.0	105.0	47.0	42.0	34.0	201.0	
26	Phosphate(mg/l)	0.054	0.21	0.3	0.1	0.12	0.18	0.08	0.09	0.05	0.05	0.15	0.2	
27	Boron(mg/l)	2.68	4.05	BDL	-	3.4	-	1.01	-	-	-	-	-	
28	Potassium(mg/l)	282.7	325.8	11.2	96.3	-	-	360	-	-	-	-	-	
29	Flouride(mg/l)	BDL	0.78	BDL	0.63	1.41	0.79	1.46	1.69	1.19	0.65	2.6	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	1.106	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.141	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.04	-	-	-	-	-	0.050	-	-	-	-	-	
37	IronTotal(mg/l)	0.50	-	-	-	-	-	0.219	-	-	-	-	-	

HARWALE WATERFALL 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	29	27	26	28	29	29	30	30	30	31	30	
2	Dissolved Oxygen(mg/l)	7.6	7.0	8.8	7.8	8.7	7.2	7.1	7.4	7.2	7.4	7.3	7.8	4 mg/l or more
3	pH	7.2	6.2	6.1	6.4	6.7	6.8	7.26	7.0	7.0	7.1	7.3	6.70	6-9
4	Conductivity(µs/cm)	63	145	83	62	50	129	55.3	62	87	107	103	153	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	2.2	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.26	0.11	0.36	0.27	0.18	BDL	0.2	0.27	0.2	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.013	BDL	BDL	BDL	BDL	BDL	0.261	BDL	BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	2300	2300	-	3300	3500	3300	2300	4900	4900	3300	4900	4900	
9	Total Coliform(MPN/100ml)	3300	7900	-	13000	9200	7900	4900	7900	7000	4900	7000	7000	5000 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	>1601	351	221	221	>1601	35	
11	Turbidity(NTU)	5.5	4.06	19.2	25.7	3.19	2.05	3.07	1.4	BDL	1.5	1.42	3.35	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	12.0	72.0	26.0	20.0	34.0	24.0	20.0	30.0	36.0	38.0	40.0	54.0	
14	Chlorides(mg/l)	12.0	21.0	7.34	6.36	8.32	29.0	5.87	6.31	6.85	8.0	7.3	14.3	
15	COD(mg/l)	BDL	10.0	6.0	6.0	8.0	6.0	6.0	6.0	10.0	8.0	10.0	6.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	3.36	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	-	BDL	BDL	0.09	0.08	0.78	
18	Total Hardness(mg/l)	24.0	58.0	20.0	18.0	30.0	18.0	12.0	30.0	30.0	38.0	38.0	48.0	
19	Calcium(mg/l)	5.61	22.4	6.41	4.01	5.0	4.8	4.0	22.0	8.8	10.0	10.0	26.0	
20	Magnesium(mg/l)	2.43	BDL	BDL	BDL	4.0	BDL	BDL	BDL	BDL	3.0	3.0	5.3	
21	Sulphate(mg/l)	2.03	BDL	BDL	BDL	4.0	4.6	4.12	4.44	4.31	4.0	2.3	6.53	
22	Sodium(mg/l)	6.9	11.4	3.3	1.4	-	-	21.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	38.0	78.0	52.0	36.0	30.0	87.0	39.0	32.2	54.0	75.0	70.0	96.0	
24	Total Fixed Solids(mg/l)	26.0	68.0	22.0	16.0	12.0	22.0	22.0	18.1	24.0	45.0	42.0	67.0	
25	Total Suspended Solids(mg/l)	8.0	35.0	17.0	16.0	33.0	5.0	10.0	15.0	19.0	38.0	12.0	24.0	
26	Phosphate(mg/l)	0.21	BDL	0.16	0.06	0.02	0.02	0.033	0.03	BDL	1.42	0.06	0.32	
27	Boron(mg/l)	1.91	1.55	BDL	BDL	-	-	0.85	-	-	-	-	-	
28	Potassium(mg/l)	1.5	2.1	0.7	0.2	-	-	0.71	-	-	-	-	-	
29	Flouride(mg/l)	-	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.28	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.018	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.53	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.072	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.352	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.91	-	-	-	-	-	0.019	-	-	-	-	-	
37	IronTotal(mg/l)	0.88	0.01 (BDL)	-	-	-	0.058	BDL	BDL	BDL	0.128	BDL	-	
38	Manganese(mg/l)	0.01	0.01 (BDL)	-	-	-	0.012	-	0.015	BDL	BDL	0.015	-	

CUMBHARJUA CANAL, CORLIM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	30	28	26	27	28	30	30	30	28	28	30	
2	Dissolved Oxygen(mg/l)	5.0	4.2	6.1	6.2	5.6	5.3	6.3	5.0	5.6	6.3	6.9	5.2	4 mg/l or more
3	pH	7.19	7.1	8.5	5.2	5.7	6.1	6.6	6.9	7.5	7.0	7.3	7.2	6.5 - 8.5
4	Conductivity(µs/cm)	41960	44510	10120	659	83	546	2800	20170	27310	34100	37250	39900	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.8	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.7	0.66	0.38	0.21	0.279	0.31	0.32	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.013	0.01	0.378	BDL	BDL	BDL	BDL	BDL	0.007	0.025	0.111	0.14	
8	Fecal Coliform(MPN/100ml)	2300	45	-	2400	330	230	490	1300	1700	1700	1400	330	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	4900	1300	-	5400	1100	490	1100	1700	2200	2200	1700	790	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	221	1601	541	>1601	131	351	
11	Turbidity(NTU)	4.43	11.39	7.15	3.44	4.05	4.43	1.05	4.43	3.88	4.06	4.72	8.31	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4	BDL	BDL	
13	Total Alkalinity(mg/l)	24.0	122.0	44.0	20.0	24.0	26.0	36.0	40.0	82.0	70.0	100.0	106.0	
14	Chlorides(mg/l)	18869.15	18455.0	3249.0	500.0	66.0	155.0	1249.61	1699.83	10122.0	19305.2	13696.0	10870.0	
15	COD(mg/l)	-	-	-	8.0	10.0	10.0	8.0	10.0	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	6.44	-	-	-	-	-	
17	Ammonia (mg/l)	0.11	0.13	0.07	0.11	BDL	-	-	BDL	0.46	0.05	BDL	0.08	
18	Total Hardness(mg/l)	1900.0	6600.0	1800.0	1800.0	36.0	54.0	254.0	260.0	2860.0	3800.0	4060.0	4800.0	
19	Calcium(mg/l)	600.0	641.0	240.5	600.0	7.0	9.0	20.04	58.0	19.24	2200.0	152.3	561.0	
20	Magnesium(mg/l)	24.3	1215.0	291.6	291.6	4.0	8.0	49.57	49.1	578.3	388.8	894.2	826.0	
21	Sulphate(mg/l)	830.54	3233.0	525.0	35.9	5.0	17.0	70.31	79.25	636.3	1466.1	1037.5	1189.0	
22	Sodium(mg/l)	5813.0	8664.0	1260.0	96.8	-	-	450.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	34634.0	30025.0	6674.0	468.0	50.0	370.0	1672.0	12344.0	17800.0	21142.0	22365.0	23566.0	
24	Total Fixed Solids(mg/l)	13190.0	21234.0	6287.0	360.0	21.0	148.0	1311.0	1958.2	16799.0	14932.0	20365.0	12423.0	
25	Total Suspended Solids(mg/l)	198.0	80.0	71.0	28.0	23.0	4.0	15.0	17.0	19.0	49.0	25.0	114.0	
26	Phosphate(mg/l)	0.055	0.06	0.03	0.13	0.03	BDL	0.08	0.11	0.07	0.09	0.09	0.08	
27	Boron(mg/l)	1.88	1.91	0.24	0.24	-	-	0.91	-	-	-	-	-	
28	Potassium(mg/l)	229.6	299.4	5.5	3.7	-	-	16.9	-	-	-	-	-	
29	Flouride(mg/l)	BDL	-	0.34	BDL	BDL	BDL	0.31	BDL	BDL	0.87	0.58	-	
30	Arsenic (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.016	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.946	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.188	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.053	-	-	-	-	-	
37	Iron(mg/l)	0.19	-	-	-	-	-	0.349	-	-	-	-	-	

RIVER ZUARI AT PANCHAWADI 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	30	31	27	27	28	28	30	30	30	31	28	
2	Dissolved Oxygen(mg/l)	5.7	5.7	5.3	7.5	7.3	7.7	8.4	5.5	7.3	6.1	5.7	5.7	4 mg/l or more
3	pH	7.2	7.3	7.3	7.1	6.4	7.6	7.4	6.9	6.9	6.8	7.5	7.1	6.5 - 8.5
4	Conductivity(µs/cm)	12060	16610	20080	98	84	248	129	6258	17460	16150	9165	22670	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.5	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	BDL	BDL	0.14	BDL	0.15	0.18	0.14	0.53	BDL	0.45	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.01	BDL	BDL	BDL	BDL	BDL	0.074	0.089	0.013	0.076	0.15	0.083	
8	Fecal Coliform(MPN/100ml)	490	490	780	1300	790	460	1300	1700	2200	1300	2200	1300	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	790	1300	1300	2200	1700	700	2300	3300	2700	3300	2700	2200	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	95	>1601	281	131	1601	
11	Turbidity(NTU)	1.16	6.59	8.79	12.05	3.98	8.12	BDL	6.25	3.49	7.85	4.5	1.55	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	4	4	BDL	BDL	BDL	BDL	BDL	4	BDL	4	
13	Total Alkalinity(mg/l)	28.0	78.0	64.0	64.0	28.0	28.0	40.0	84.0	40.0	72.0	100.0	74.0	
14	Chlorides(mg/l)	5220.0	6997.8	9112.0	21.0	19.43	200.4	450.0	6556.4	6373.0	9784.2	3749.0	7093.6	
15	COD(mg/l)	-	-	-	8.0	6.0	4.0	12.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	16.24	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	BDL	BDL	0.06	BDL	BDL	-	BDL	0.08	0.08	BDL	BDL	
18	Total Hardness(mg/l)	3500.0	4500.0	2720.0	24.0	22.0	28.0	120.0	3200.0	2380.0	3200.0	180.0	3000.0	
19	Calcium(mg/l)	3000.0	1002.0	192.0	4.0	5.0	4.81	24.05	1200.0	14.43	721.4	72.14	801.6	
20	Magnesium(mg/l)	121.5	486.0	544.0	3.0	2.0	3.89	14.6	486.0	491.0	340.2	175.0	243.0	
21	Sulphate(mg/l)	1106.0	174.3	1241.0	7.0	BDL	11.5	9.13	1854.45	924.4	3829.6	190.0	3817.7	
22	Sodium(mg/l)	1831.0	117.5	2861.0	19.1	-	-	59.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	7107.0	16059.0	14056.0	67.0	56.0	152.0	78.0	3754.8	11380.0	9272.0	5571.0	13334.0	
24	Total Fixed Solids(mg/l)	5943.0	14530.0	8434.0	25.0	23.0	124.0	62.0	1900.0	11330.0	5004.0	3593.0	9300.0	
25	Total Suspended Solids(mg/l)	18.0	48.0	65.0	20.0	16.0	14.0	10.0	41.0	41.0	54.0	50.0	57.0	
26	Phosphate(mg/l)	0.88	0.08	0.19	0.37	0.02	0.03	0.108	0.1	0.05	0.09	0.7	0.11	
27	Boron(mg/l)	1.67	2.37	-	-	-	-	1.53	-	-	-	-	-	
28	Potassium(mg/l)	93.7	3977	144.5	0.5	-	-	1.7	-	-	-	-	-	
29	Flouride(mg/l)	BDL	BDL	0.36	BDL	BDL	BDL	2.69	BDL	1.26	0.51	0.56	0.72	
30	Arsenic (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.766	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.023	-	-	-	-	-	
37	Iron(mg/l)	0.82	-	-	-	-	-	0.241	-	-	-	-	-	

RIVER ZUARI AT CORTALIM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	32	32	28	27	28	29	29	29	29	30	30	28	
2	Dissolved Oxygen(mg/l)	4.3	6.1	5.6	7.4	6.7	5.3	5.1	5.8	5.8	7.9	5.8	4.8	4 mg/l or more
3	pH	7.0	8.1	7.3	7.1	6.3	7.5	7.4	6.5	6.3	7.4	7.7	7.6	6.5 - 8.5
4	Conductivity(µs/cm)	42780	40400	14240	37	7632	11530	34230	31920	40100	43410	52920	54170	
5	BOD(mg/l)	BDL	BDL	2.1	BDL	BDL	BDL	BDL	2.9	2.2	2.9	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.37	BDL	0.48	0.12	0.13	BDL	0.6	0.07	0.4	BDL	0.11	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.006	0.01	BDL	BDL	0.01	BDL	0.007	BDL	0.018	BDL	0.037	BDL	
8	Fecal Coliform(MPN/100ml)	2300	3300	-	790	4900	3300	3300	4900	7000	4900	3300	4900	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	4900	7900	-	2200	7900	7900	4900	7900	11000	7900	4900	7000	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	1601	431	>1601	351	541	>1601	
11	Turbidity(NTU)	15.72	3.25	BDL	6.73	6.41	7.08	37.6	1.67	BDL	16.82	21.6	12.49	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	6.0	4.0	BDL	BDL	14.0	BDL	BDL	BDL	6.0	10.0	BDL	10.0	
13	Total Alkalinity(mg/l)	30.0	108.0	54.0	58.0	50.0	48.0	96.0	102.0	108.0	130.0	100.0	140.0	
14	Chlorides(mg/l)	14187.09	16437.0	8062.0	7.0	3108.0	3748.8	14084.0	10997.0	20079.7	13996.0	17611.6	14745.0	
15	COD(mg/l)	-	-	-	2.0	6.0	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	5.04	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	0.05	BDL	0.06	0.05	BDL	-	0.16	BDL	0.29	0.08	0.50	
18	Total Hardness(mg/l)	4700.0	5900.0	2800.0	14.0	1400.0	1000.0	4160.0	3800.0	32000.0	4600.0	9000.0	5000.0	
19	Calcium(mg/l)	400.8	440.9	800.0	3.0	240.0	160.3	289.0	400.8	5000.0	561.12	801.6	801.6	
20	Magnesium(mg/l)	899.1	1166.0	486.0	BDL	194.0	145.8	836.0	680.4	6561.0	777.6	1701.0	729.0	
21	Sulphate(mg/l)	1450.3	2010.0	1411.9	3.6	304.0	446.9	1119.0	882.7	689.1	2634.5	1947.8	2550.0	
22	Sodium(mg/l)	7827.0	6955.0	1793.0	3.4	-	-	7250.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	25240.0	26852.0	8400.0	24.0	5190.0	7158.0	23961.0	19790.0	23659.0	26100.0	32134.0	26839.0	
24	Total Fixed Solids(mg/l)	14762.0	16742.0	5136.0	10.0	2075.0	5472.0	14386.0	17979.0	18647.0	25055.0	24018.0	24814.0	
25	Total Suspended Solids(mg/l)	27.0	18.0	33.0	23.0	74.0	41.0	79.0	42.0	59.0	67.0	52.0	64.0	
26	Phosphate(mg/l)	0.02	0.18	0.12	0.09	0.05	0.1	0.07	0.25	0.11	0.49	0.06	0.09	
27	Boron(mg/l)	1.25	2.39	4.3	-	-	-	1.32	-	-	-	-	-	
28	Potassium(mg/l)	278.8	279	89.8	0.1	-	-	170	-	-	-	-	-	
29	Flouride(mg/l)	-	1.5	0.66	BDL	0.48	0.58	1.16	0.77	BDL	1.73	0.32	BDL	
30	Arsenic (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.751	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.294	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.025	-	-	-	-	-	
37	Iron(mg/l)	2.36	-	-	-	-	-	0.175	-	-	-	-	-	

CREEK AT DANDO MOLLO, VELSAO, MORMUGAO 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	34	35	28	28	28	29	29	29	29	30	29	27	
2	Dissolved Oxygen(mg/l)	7.7	-	5.4	6.5	6.5	6.1	7.3	6.3	4.8	6.4	7.8	8.0	4 mg/l or more
3	pH	7.8	8.3	7.2	6.5	6.6	6.4	7.4	7.1	7.0	6.9	7.9	8.3	6-9
4	Conductivity(µs/cm)	10000	17580	-	-	160	264	20780	-	-	46370	65900	4882	
5	BOD(mg/l)	2.8	BDL	BDL	2.1	2.3	BDL	BDL	2.9	BDL	BDL	BDL	2.5	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	3.77	2.2	0.49	0.53	0.21	0.21	2.92	0.4	0.51	0.5	10.4	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.652	0.1	BDL	0.04	0.006	BDL	0.06	0.008	0.026	0.008	8.008	BDL	
8	Fecal Coliform(MPN/100ml)	1300	790	-	790	2300	230	230	2600	4900	7000	2300	2300	
9	Total Coliform(MPN/100ml)	1700	1700	-	1700	4900	490	330	3200	7900	9400	3300	3300	5000 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	49	49	1601	>1601	351	241	
11	Turbidity(NTU)	3.21	3.91	BDL	5.62	1.92	2.12	BDL	BDL	0.78	BDL	BDL	BDL	
12	Phenolphthalein Alkalinity(mg/l)	2.0	16.0	BDL	BDL	BDL	BDL	4.0	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	120.0	48.0	48.0	44.0	54.0	72.0	75.0	80.0	88.0	100.0	76.0	136.0	
14	Chlorides(mg/l)	13496.0	6360.0	2039.8	2282.6	31.0	40.0	7164.0	7948.0	19118.9	2100.0	3179.9	2100.0	
15	COD(mg/l)	-	-	-	-	6.0	6.0	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	6.72	-	-	-	-	-	
17	Ammonia (mg/l)	4.93	0.37	BDL	BDL	0.09	0.07	-	0.05	0.05	0.17	0.06	0.18	
18	Total Hardness(mg/l)	2800.0	2600.0	800.0	1000.0	46.0	66.0	2360.0	1980.0	4800.0	460.0	600.0	520.0	
19	Calcium(mg/l)	241.0	240.5	400.0	800.0	13.6	21.0	192.0	136.3	2000.0	80.2	160.3	72.14	
20	Magnesium(mg/l)	534.4	486.0	97.2	97.2	2.9	3.0	457.0	398.5	680.4	63.2	48.6	82.6	
21	Sulphate(mg/l)	452.0	631.0	61.2	296.1	5.0	2.0	731.0	695.3	338.5	673.6	857.0	467.3	
22	Sodium(mg/l)	2929.0	2928.0	43.0	77.2	-	-	7410.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	5480.0	11055.0	227.0	365.0	100.0	159.0	14546.0	4600.0	5214.0	27839.0	39445.0	2687.0	
24	Total Fixed Solids(mg/l)	4024.0	7285.0	149.0	213.0	79.0	44.0	8728.0	4520.0	3795.0	25832.0	30024.0	2490.0	
25	Total Suspended Solids(mg/l)	38.0	44.0	38.0	36.0	67.0	20.0	51.0	80.0	44.0	78.0	53.0	80.0	
26	Phosphate(mg/l)	2.57	0.39	0.28	0.19	0.15	0.09	0.105	0.34	0.12	0.31	0.23	0.15	
27	Boron(mg/l)	1.82	2.17	4.78	4.39	1.16	-	0.92	-	-	-	-	-	
28	Potassium(mg/l)	143.4	130	2.7	5.7	-	-	140	-	-	-	-	-	
29	Flouride(mg/l)	BDL	1.09	BDL	BDL	0.38	BDL	1.12	0.92	1.71	2.79	1.08	1.45	
30	Arsenic (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.02	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.878	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.076	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.021	-	-	-	-	-	
37	Iron(mg/l)	1.38	-	-	-	-	-	0.027	-	-	-	-	-	

RIVER MANDOVI NEAR MANDOVI BRIDGE, PANAJI 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	29	29	27	29	28	31	31	31	30	30		
2	Dissolved Oxygen(mg/l)	5.9	5.8	4.9	7.0	7.2	6.6	5.9	5.3	6.6	6.4	7.2		4 mg/l or more
3	pH	8	7.4	7.4	6.6	7.7	7.8	7.6	7.6	7.6	7.7	7.9		6.5 - 8.5
4	Conductivity(µs/cm)	47660	41970	45410	283	40180	48800	32300	48650	38500	50300	51700		
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.33	0.12	BDL	BDL	0.07	BDL	BDL	0.12	0.14		
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.04	BDL	0.007	BDL	BDL	0.05	0.01	0.028	0.008	0.02		
8	Fecal Coliform(MPN/100ml)	45	68	1100	230	230	130	490	490	780	130	130		100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	68	120	3500	790	790	170	2400	790	1300	230	230		
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	901	351	171	7	15		
11	Turbidity(NTU)	1.27	3.59	9.04	12.3	BDL	9.79	5.54	3.45	3.21	2.27	1.26		30 NTU
12	Phenolphthalein Alkalinity(mg/l)	4.0	12.0	14.0	BDL	14.0	8.0	8	10.0	6.0	8.0	6.0		
13	Total Alkalinity(mg/l)	36.0	122.0	114.0	32.0	90.0	78.0	78	100.0	100.0	120.0	102.0		
14	Chlorides(mg/l)	18619	19062.0	23743.0	80.0	13016.0	12230.0	15521.8	17484.0	13942.0	22993.0	13698.0		
15	COD(mg/l)	-	-	-	8.0	-	-	-	-	-	-	-		
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	6.72	-	-	-	-		
17	Ammonia (mg/l)	0.103	BDL	0.07	0.07	BDL	BDL	-	0.07	BDL	BDL	0.2		
18	Total Hardness(mg/l)	7500.0	4400.0	5980.0	38.0	4200.0	7500.0	7000.0	5680.0	7200.0	8600.0	8400.0		
19	Calcium(mg/l)	801.6	2800.0	408.8	5.6	289.0	393.0	5000.0	465.0	393.0	400.8	481.0		
20	Magnesium(mg/l)	1336.5	388.8	1205.3	5.8	846.0	1584.0	486.0	1098.0	1512.0	1847.0	1750.0		
21	Sulphate(mg/l)	1569.1	4066.0	1014.4	8.34	1994.0	2023.0	1808.3	2394.0	2016.0	258.0	1685.0		
22	Sodium(mg/l)	8409.0	7459.0	3972.0	46.3	-	-	3610	-	-	-	-		
23	Total Dissolved Solids(mg/l)	32032.0	24327.0	27216.0	171.0	28126.0	28928.0	19703	34055.0	22594.0	30131.0	31021.0		
24	Total Fixed Solids(mg/l)	30636.0	17987.0	26688.0	156.0	16875.0	12896.0	14890	20433.0	18368.0	28235.0	16752.0		
25	Total Suspended Solids(mg/l)	280.0	35.0	20.0	62.0	74.0	17.0	41	50.0	53.0	130.0	58.0		
26	Phosphate(mg/l)	0.067	0.49	0.08	0.15	0.11	0.05	0.04	BDL	0.06	0.05	BDL		
27	Boron(mg/l)	2.23	5.01	3.99	0.69	-	-	1.0	-	-	-	-		
28	Potassium(mg/l)	290.2	271.1	226.5	1.3	-	-	300	-	-	-	-		
29	Flouride(mg/l)	BDL	-	BDL	BDL	1.25	0.61	0.99	1.07	0.44	1.31	0.21		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-		
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.039	-	-	-	-		
32	Copper(mg/l)	BDL	-	-	-	-	-	1.711	-	-	-	-		
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-		
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.186	-	-	-	-		
35	Nickel(mg/l)	0.08	-	-	-	-	-	BDL	-	-	-	-		
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.207	-	-	-	-		
37	IronTotal(mg/l)	0.36	-	-	-	-	-	1.399	-	-	-	-		
38	Manganese(mg/l)	0.03	-	-	-	-	-	-	-	-	-	-		

Sampling not done

SELAULIM RESERVOIR AT SELAULIM, SANGUEM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	32	35	27	27	27	28	29	31	30	31	30	28	
2	Dissolved Oxygen mg/l	7.9	7.7	5.4	7.3	8.0	8.1	8.6	8.0	6.8	8.3	7.5	5.9	4 mg/l or more
3	pH	6.37	7.0	7.4	6.5	6.5	7.0	7.4	7.2	7.2	7.6	7.4	7.31	6-9
4	Conductivity(µs/cm)	67	51	75	44	36	37	34	52	256	53	63	53	
5	BOD(mg/l) mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3	2.1	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.12	0.13	0.1	0.1	BDL	0.01	0.15	0.1	0.11	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	0.005	0.005	0.005	0.005	BDL	BDL	0.005	0.005	0.01	BDL	
8	Fecal Coliform(MPN/100ml)	Nil	Nil	-	8	23	13	13	130	130	79	170	4.5	
9	Total Coliform(MPN/100ml)	4.5	1.8	-	49	240	27	49	220	240	240	350	23	5000 or less MPN/100 ml
10	Fecal Streptococci MPN/100ml	-	-	-	-	-	-	47	33	13	27	8	-	
11	Turbidity(NTU)	2.4	2.73	BDL	1.7	1.25	1.0	BDL	1.44	1.97	1.11	1.55	BDL	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	10.0	26.0	28.0	32.0	22.0	32.0	18.0	26.0	30.0	24.0	20.0	34.0	
14	Chloride mg/l	12.23	4.4	12.1	9.23	7.5	5.0	4.86	7.5	12.8	8.0	7.83	7.0	
15	COD(mg/l)	4.0	6.0	4.0	6.0	2.0	4.0	BDL	40.0	6.0	4.0	BDL	4.0	
16	Ammonia mg/l	BDL	0.08	BDL	BDL	0.05	BDL	-	0.07	0.14	BDL	BDL	BDL	
17	Total Kjeldhal Nitrogen(mg/l)	-	-	-	-	-	-	5.88	-	-	-	-	-	
18	Hardness(mg/l)	22.0	26.0	46.0	36.0	10.0	26.0	10.0	12.0	12.0	12.0	16.0	30.0	
19	Calcium(mg/l)	4.81	5.61	12.0	8.0	2.0	7.0	3.0	3.21	10.0	3.21	3.2	3.0	
20	Magnesium(mg/l)	2.43	2.92	8.3	6.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL	5	
21	Sulphate(mg/l)	BDL	BDL	2.4	3.6	BDL	2.0	BDL	2.55	4.8	BDL	BDL	BDL	
22	Sodium(mg/l)	5.6	5.2	7.5	2.5	-	-	22.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	40.0	34.0	45.0	28.0	22.0	22.0	22.0	33.0	158.0	32.0	42.0	33.0	
24	Total Fixed Solids(mg/l)	23.0	24.0	23.0	13.0	17.0	11.0	13.0	29.0	97.0	27.0	22.0	13.0	
25	Total Suspended Solid (mg/l)	19.0	7.0	18.0	12.0	4.0	9.0	3.0	4.0	11.0	5.0	10.0	21.0	
26	Phosphate(mg/l)	BDL	0.04	0.16	0.03	0.09	BDL	0.02	BDL	0.03	BDL	BDL	0.03	
27	Boron(mg/l)	BDL	0.38	0.56	0.63	0.68	-	0.97	-	-	-	-	-	
28	Potassium(mg/l)	4.1	1.6	0.1	0.2	-	-	0.37	-	-	-	-	-	
29	Fluoride(mg/l)	BDL	0.5	BDL	BDL	0.43	BDL	BDL	BDL	BDL	0.56	BDL	0.26	
30	Arsenic (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.015	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.9	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.408	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.01	-	-	-	-	-	
37	Iron(mg/l)	2.56	0.01	-	-	-	0.166	0.238	BDL	BDL	BDL	0.054	-	
38	Manganese (mg/l)	BDL	0.21	-	-	-	BDL	-	0.015	BDL	0.012	0.012	-	

AGRICULTURAL CANAL DOWNSTREAM OF CUNCOLIM INDUSTRIAL ESTATE 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for Class E as per CPCB classification based on designated best use
1	Temperature°C	32	30	28	27	27	29	30	29		28	29	28	
2	Dissolved Oxygen(mg/l)	7.7	7.6	5.2	4.9	6.2	5.0	6.3	7.2		7.7	7.5	7.1	
3	pH	7.5	7.2	6.2	6.2	5.8	6.3	7.0	6.7		6.7	6.3	7.4	6-8.5
4	Conductivity(µs/cm)	55	77	591	605	531	368	893	301		50	58	94	Max 2250 µs/cm
5	BOD(mg/l)	BDL	0.5	BDL	BDL	2.0	BDL	BDL	BDL		BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.92	0.89	1.36	1.07	0.39	0.71		BDL	BDL	1.99	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.03	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	780	780	-	330	230	450	78	1700		2300	2300	1300	
9	Total Coliform(MPN/100ml)	2300	2300	-	490	490	780	230	2200		3300	4900	3300	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	47		541	71	541	
11	Turbidity(NTU)	1.3	3.04	4.3	2.63	1.56	1.15	BDL	1.27		1.27	BDL	1.15	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	10.0	30.0	18.0	18.0	18.0	22.0	32.0	56.0		30.0	24.0	40.0	
14	Chlorides(mg/l)	8.3	100.0	37.5	39.0	44.8	40.9	52.5	47.0		7.28	8.3	14.2	
15	COD(mg/l)	4.0	2.0	4.0	2.0	16.0	10.0	10.0	6.0		12.0	4.0	10.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	3.92	-		-	-	-	
17	Ammonia (mg/l)	BDL	0.06	0.16	0.19	0.05	0.06	-	0.16		0.1	0.06	0.06	
18	Total Hardness(mg/l)	24.0	9000.0	160.0	120.0	16.0	42.0	156.0	94.0		24.0	22.0	76.0	
19	Calcium(mg/l)	4.81	1603.2	16.0	24.1	3.21	26.0	12.02	17.0		12.0	3.2	21.6	
20	Magnesium(mg/l)	1.75	1215.0	29.2	14.6	2.0	3.9	30.6	13.0		2.9	3.4	4.86	
21	Sulphate(mg/l)	BDL	55.5	1929.7	343.8	117.2	87.5	137	2.0		7.39	BDL	643.9	
22	Sodium(mg/l)	4.8	11.4	65.8	78.6	-	-	95.0	-		-	-	-	
23	Total Dissolved Solids(mg/l)	35.0	53.0	355.0	369.0	308.0	206.0	538.0	183.0		32.0	40.0	53.0	
24	Total Fixed Solids(mg/l)	25.0	31.0	276.0	274.0	243.0	117.0	438.0	112.0		21.0	22.0	20.0	
25	Total Suspended Solids(mg/l)	7.0	7.0	13.0	14.0	17.0	44.0	13.0	24.0		18.0	9.0	30.0	
26	Phosphate(mg/l)	0.06	0.04	276	0.21	0.05	0.05	0.027	BDL		BDL	BDL	0.74	
27	Boron(mg/l)	BDL	2.55	1.16	0.39	3.82	-	1.01	-		-	-	-	Max 2mg/l
28	Potassium(mg/l)	1.3	1.7	3.1	5.1	-	-	10.0	-		-	-	-	
29	Flouride(mg/l)	-	-	BDL	BDL	0.2	BDL	2.5	BDL		BDL	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-		-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.053	-		-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	BDL	-		-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-		-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.031	-		-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	6.724	-		-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.22	-		-	-	-	
37	IronTotal(mg/l)	0.23	-	-	-	-	-	0.203	-		-	-	-	

**CANAL
WAS DRY**

RUMDER LAKE, NUVEM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	30	27	26	27	30	29	28	30	29	29	29	
2	Dissolved Oxygen (mg/l)	5.5	3.3	4.7	6.1	4.9	5.9	6.5	2.9	4.5	2.9	2.8	3.3	4 mg/l or more
3	pH	7.65	7.0	6.7	6.5	6.4	6.9	7.85	6.4	6.4	6.2	7.4	7.3	6-9
4	Conductivity µs/cm	575	-	1989	205	79	102	52	131	1.0	15330	211	246	
5	BOD(mg/l)	2.5	2.2	2.6	2.5	BDL	BDL	BDL	6.0	3.2	3.1	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.24	BDL	BDL	0.28	0.32	BDL	BDL	0.41	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	0.021	0.013	0.013	0.015	BDL	0.097	0.019	BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	1300	2300	-	490	3300	4900	3300	4600	2300	7000	7900	2300	
9	Total Coliform(MPN/100ml)	2300	7900	-	790	7900	7900	7900	7000	3300	11000	14000	3300	5000 or less MPN/100 ml
10	Fecal Streptococci(MPN/100ml)	-	-	-	-	-	-	-	32	33	23	95	>1601	
11	Turbidity(NTU)	4.3	7.21	9.5	3.14	5.56	5.77	1.08	3.51	2.46	5.29	2.9	24.9	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	18.0	48.0	18.0	18.0	22.0	28.0	46.0	46.0	40.0	58.0	72.0	56.0	
14	Chloride mg/l	37.50	349.40	45.50	43.50	10.60	9.40	19.00	25.00	17.48	19.90	875.00	388.00	
15	COD(mg/l)	14.0	4.0	4.0	4.0	12.0	13.0	8.0	14.0	10.0	11.0	40.0	4.0	
16	Ammonia mg/l	BDL	0.34	0.06	0.07	0.07	0.08	-	0.33	0.14	0.07	BDL	BDL	
17	Total Kjeldhal Nitrogen(mg/l)	-	-	-	-	-	-	8.12	-	-	-	-	-	
18	Hardness(mg/l)	42.0	2500.0	32.0	36.0	24.0	32.0	158.0	38.0	90.0	54.0	46.0	66.0	
19	Calcium(mg/l)	12.02	400.8	4.81	5.61	6.41	20.0	6.41	10.0	30.0	32.0	12.8	13.0	
20	Magnesium(mg/l)	2.9	364.5	4.9	5.35	BDL	2.9	34.5	3.0	14.6	5.3	3.4	8.0	
21	Sulphate(mg/l)	7.16	15.85	BDL	13.7	7.53	5.4	4.92	2.0	10.91	9.61	31.3	104.0	
22	Sodium(mg/l)	32.2	31.6	26.4	25.5	-	-	680.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	324.0	33.0	117.0	123.0	46.0	63.0	32.0	79.0	931.2	90.0	137.0	172.0	
24	Total Fixed Solids(mg/l)	295.0	29.0	94.0	99.0	39.0	32.0	27.0	52.0	488.0	59.0	82.0	65.0	
25	Total Suspended Solid (mg/l)	79.0	14.0	24.0	19.0	15.0	24.0	13.0	68.0	35.0	22.0	16.0	16.0	
26	Phosphate(mg/l)	0.062	0.02	0.1	0.09	0.08	0.12	0.039	0.43	0.31	BDL	BDL	0.02	
27	Boron(mg/l)	2.49	0.79	0.77	BDL	1.26	-	1.05	-	-	-	-	-	
28	Potassium(mg/l)	20.8	3.9	2.2	0.9	-	-	41	-	-	-	-	-	
29	Fluoride(mg/l)	BDL	-	BDL	BDL	BDL	BDL	2.63	0.33	BDL	0.4	0.48	BDL	
30	Arsenic (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.947	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.028	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.04	-	-	-	-	-	0.011	-	-	-	-	-	
37	Iron(mg/l)	0.76	-	-	-	-	-	0.165	-	-	-	-	-	

RIVER SAL AT ORLIM BRIDGE 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	31	27	28	28	30	30	30	30	30	30	29	
2	Dissolved Oxygen(mg/l)	7.7	6.4	4.0	4.1	6.9	7.0	2.0	5.1	4.7	5.5	5.1	3.8	4 mg/l or more
3	pH	7.6	7.9	6.7	6.5	7.7	6.8	7.0	6.8	6.7	7.1	6.9	7.2	6.5 - 8.5
4	Conductivity(µs/cm)	26200	34780	242	373	334	455	1528	12460	20300	25700	22760	23990	
5	BOD(mg/l)	2.8	2.1	BDL	2.1	2.9	2.6	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.02	0.6	0.55	0.41	1.3	0.457	0.7	0.5	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.009	BDL	BDL	0.041	BDL	0.243	0.014	0.009	0.331	0.008	0.04	
8	Fecal Coliform(MPN/100ml)	780	130	-	490	790	790	330	2300	1300	1700	1300	2200	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	2300	220	-	1300	1300	3500	790	3100	2300	2700	2700	3300	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	>1601	71	541	221	6	921	
11	Turbidity(NTU)	7.83	9.64	4.91	5.6	1.45	2.05	1.25	2.23	1.25	5.17	3.22	2.31	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	6.0	BDL	6.0	BDL	
13	Total Alkalinity(mg/l)	18.0	118.0	34.0	42.0	54.0	60.0	56.0	78.0	80.0	96.0	88.0	106.0	
14	Chlorides(mg/l)	9872.0	18744.2	95.3	101.3	17.3	20.0	699.78	4892.1	8135.0	8219.0	9106.2	10497.0	
15	COD(mg/l)	-	-	4.0	4.0	8.0	6.0	8.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	5.32	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	0.2	BDL	0.05	0.53	BDL	-	0.18	BDL	0.59	0.13	0.69	
18	Total Hardness(mg/l)	4800.0	5500.0	46.0	82.0	44.0	480.0	136.0	1400.0	2360.0	3000.0	5400.0	3000.0	
19	Calcium(mg/l)	1603.2	801.6	8.0	20.0	10.0	88.2	18.44	160.3	176.0	321.0	2400.0	321.0	
20	Magnesium(mg/l)	194.4	850.5	6.3	7.8	8.3	63.2	21.87	243.0	466.0	535.0	729.0	535.0	
21	Sulphate(mg/l)	665.7	1797.0	276.5	6.2	10.4	237.7	23.44	348.7	712.0	573.0	1279.2	299.0	
22	Sodium(mg/l)	4637.0	6759.0	40.0	1727.0	-	-	690.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	14519.0	22607.0	164.0	250.0	201.0	275.0	917.0	6997.0	34210.0	15420.0	13656.0	14180.0	
24	Total Fixed Solids(mg/l)	13517.0	16503.0	91.0	201.0	168.0	185.0	692.0	5250.0	20256.0	8962.0	7428.0	7410.0	
25	Total Suspended Solids(mg/l)	120.0	96.0	10.0	11.0	34.0	44.0	11.0	39.0	42.0	30.0	25.0	106.0	
26	Phosphate(mg/l)	0.207	0.24	0.24	0.12	0.2	0.19	0.15	0.07	0.09	0.1	0.12	0.5	
27	Boron(mg/l)	1.48	2.94	0.47	-	0.63	-	0.97	-	-	-	-	-	
28	Potassium(mg/l)	189.2	265.7	3.3	99.6	-	-	13.2	-	-	-	-	-	
29	Flouride(mg/l)	BDL	0.66	BDL	BDL	BDL	0.23	0.33	0.85	0.81	0.59	BDL	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.011	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	1.139	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.243	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.73	-	-	-	-	-	0.023	-	-	-	-	-	
37	IronTotal(mg/l)	2.35	-	-	-	-	-	0.252	-	-	-	-	-	

RIVER SAL AT KHAREBAND, MARGAO 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C			28	28	29	30	29	30	30	29	30		
2	Dissolved Oxygen(mg/l)			2.5	2.3	4.1	4.0	1.2	0.8	BDL	BDL	BDL		4 mg/l or more
3	pH			6.4	6.3	7.8	6.8	7.2	6.7	6.7	6.6	6.7		6.5 - 8.5
4	Conductivity(µs/cm)			97	115	122	478	211	-	227	261	321		
5	BOD(mg/l)			-	-	BDL	2.0	3.6	3.4	5.0	6.0	3.6		3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)			0.55	0.63	0.35	1.4	0.977	1.8	2.54	1.79	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l			BDL	BDL	0.039	BDL	0.679	0.022	BDL	0.345	0.013		
8	Fecal Coliform(MPN/100ml)			-	7900	7900	7900	4900	11000	17000	13000	7900		100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)			-	17000	13000	24000	13000	22000	35000	28000	24000		
10	Fecal Streptococci (MPN/100ml)			-	-	-	-	>1601	33	>1601	>1601	>1601		
11	Turbidity(NTU)			7.02	7.2	BDL	2.79	1.31	4.63	4.01	10.41	6.95		30 NTU
12	Phenolphthalein Alkalinity(mg/l)			BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4.0		
13	Total Alkalinity(mg/l)			36.0	42.0	58.0	60.0	44.0	48.0	36.0	40.0	92.0		
14	Chlorides(mg/l)			40.9	51.0	101.5	130	35.99	2201.5	23.0	440.0	13720.0		
15	COD(mg/l)			4.0	2.0	10.0	4.0	10.0	10.0	18.0	18.0	-		
16	Total Kjeldahl Nitrogen(mg/l)			-	-	-	-	5.88	-	-	-	-		
17	Ammonia (mg/l)	Sample Not collected due to excessive growth of Water Hyacinth	Sample Not collected due to excessive growth of Water Hyacinth	BDL	BDL	BDL	0.05	-	BDL	BDL	3.93	0.14	Sample Not collected due to excessive growth of Water Hyacinth	
18	Total Hardness(mg/l)			28.0	50.0	30.0	58.0	44.0	46.0	40.0	1000.0	4800.0		
19	Calcium(mg/l)			6.4	11.2	26.0	12.0	12.83	13.6	14.0	48.0	2000.0		
20	Magnesium(mg/l)			2.9	5.3	BDL	6.8	2.92	2.92	BDL	214.0	680.4		
21	Sulphate(mg/l)			24.47	12.5	45.3	448.1	13.88	31.7	7.0	9.0	1111.1		
22	Sodium(mg/l)			14.5	18.2	-	-	58.0	-	-	-	-		
23	Total Dissolved Solids(mg/l)			56.0	66.0	76.0	290.0	128.0	133.0	158.0	160.0	199.0		
24	Total Fixed Solids(mg/l)			35.0	42.0	31.0	244.0	99.0	95.0	92.0	62.0	87.0		
25	Total Suspended Solids(mg/l)			14.0	14.0	23.0	36.0	50.0	14.0	29.0	76.0	22.0		
26	Phosphate(mg/l)			0.18	0.1	0.1	0.13	0.28	0.3	0.48	0.96	0.14		
27	Boron(mg/l)			BDL	-	0.89	-	1.01	-	-	-	-		
28	Potassium(mg/l)			2.2	1.7	-	-	5.9	-	-	-	-		
29	Flouride(mg/l)			BDL	BDL	1.29	0.88	BDL	BDL	0.31	BDL	1.18		
30	Arsenic(mg/l)			-	-	-	-	BDL	-	-	-	-		
31	Cadmium(mg/l)			-	-	-	-	0.012	-	-	-	-		
32	Copper(mg/l)			-	-	-	-	0.926	-	-	-	-		
33	Lead(mg/l)			-	-	-	-	0.104	-	-	-	-		
34	Chromium(mg/l)			-	-	-	-	0.211	-	-	-	-		
35	Nickel(mg/l)			-	-	-	-	BDL	-	-	-	-		
36	Zinc(mg/l)			-	-	-	-	0.022	-	-	-	-		
37	IronTotal(mg/l)			-	-	-	-	0.128	-	-	-	-		

RAIA LAKE 2019-2020															
Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers	
1	Temperature°C	30	The Lake was dry	27	28	27	28	29	30	30	30	29	29		
2	Dissolved Oxygen mg/l	9.5		4.6	6.4	6.6	7.2	7.4	7.6	6.9	6.2	6.3	6.3	6.3	4 mg/l or more
3	pH	7.68		7.0	6.6	6.3	6.9	7.2	6.7	6.7	7.1	7.3	8.7	8.7	6-9
4	Conductivity(µs/cm)	144		95	80	60	61	78	134	121	161	148	143	143	
5	BOD(mg/l) mg/l	4.6		BDL	BDL	BDL	2.6	BDL	2.8	BDL	2.1	2.3	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL		0.5	0.58	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.013		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.006	BDL	
8	Fecal Coliform(MPN/100ml)	2300		-	78	2300	3300	3300	4900	4900	4900	4900	4900	2200	
9	Total Coliform(MPN/100ml)	4600		-	170	3300	7900	7900	7900	7900	7000	7900	4900	4900	5000 or less MPN/100 ml
10	Fecal Streptococci MPN/100ml	-		-	-	-	-	351	351	95	351	50	4	4	
11	Turbidity(NTU)	74		2.79	3.04	BDL	BDL	1.3	2.55	2.47	5.25	12.16	13.7	13.7	
12	Phenolphthalein Alkalinity(mg/l)	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	22.0		22.0	26.0	24.0	36.0	30.0	40.0	40.0	40.0	36.0	42.0	42.0	
14	Chloride mg/l	26.42		13.1	14.6	10.0	9.0	9.71	24.0	17.7	28.5	20.6	19.0	19.0	
15	COD(mg/l)	30		7.0	10.0	4.0	8.0	6.0	4.0	12.0	6.0	13.0	8.0	8.0	
16	Ammonia mg/l	BDL		BDL	0.08	0.06	0.07	-	BDL	0.19	0.37	0.16	0.08	0.08	
17	Total Kjeldhal Nitrogen(mg/l)			-	-	-	-	5.6	-	-	-	-	-	-	
18	Hardness(mg/l)	66.0		20.0	14.0	18.0	40.0	24.0	28.0	40.0	34.0	32.0	42.0	42.0	
19	Calcium(mg/l)	15.23		10.0	8.0	4.81	8.0	5.0	4.81	14.0	5.61	4.8	6.0	6.0	
20	Magnesium(mg/l)	6.8		2.4	BDL	BDL	5.0	3.0	3.9	6.3	4.9	4.86	7.0	7.0	
21	Sulphate(mg/l)	12.78		9.2	10.5	2.5	3.0	4.62	6.52	11.09	3.1	BDL	5.16	5.16	
22	Sodium(mg/l)	20.4		2.2	0.9	-	-	17.0	-	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	146.0		57.0	47.0	36.0	37.0	53.0	80.0	75.0	98.0	101.0	86.0	86.0	
24	Total Fixed Solids(mg/l)	87.0		29.0	31.0	31.0	17.0	30.0	70.0	49.0	91.0	71.0	39.0	39.0	
25	Total Suspended Solid(mg/l)	55.0		20.0	14.0	12.0	11.0	3.0	12.0	31.0	12.0	18.0	46.0	46.0	
26	Phosphate(mg/l)	0.03		0.08	0.05	0.05	0.02	0.23	0.05	0.07	0.06	0.06	BDL	BDL	
27	Boron(mg/l)	BDL		0.93	1.53	1.28	-	1.01	-	-	-	-	-	-	
28	Potassium(mg/l)	5.2		1.5	0.7	-	-	1.3	-	-	-	-	-	-	
29	Fluoride(mg/l)	BDL		0.27	0.14	0.49	BDL	0.24	0.49	0.37	2.63	BDL	0.57	0.57	
30	Arsenic (mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-	-	
31	Cadmium(mg/l)	BDL		-	-	-	-	0.012	-	-	-	-	-	-	
32	Copper(mg/l)	BDL		-	-	-	-	0.892	-	-	-	-	-	-	
33	Lead(mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-	-	
34	Chromium(mg/l)	BDL		-	-	-	-	0.309	-	-	-	-	-	-	
35	Nickel(mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-	-	
36	Zinc(mg/l)	BDL		-	-	-	-	0.027	-	-	-	-	-	-	
37	Iron(mg/l)	4.18		-	-	-	-	-	0.107	-	-	-	-	-	

SAIPEM LAKE, NAVELIM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C			28	28	28	29	29	30					
2	Dissolved Oxygen mg/l			4.2	4.0	-	4.0	2.5	-					4 mg/l or more
3	pH			6.4	6.4	8.1	6.8	7.14	7.3					6-9
4	Conductivity(µs/cm)			213	256	270	333	294	441					
5	BOD(mg/l) mg/l			BDL	2.6	-	2.8	5.4	-					3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)			1.37	1.3	0.29	1.24	2.166	2.5					
7	Nitrite Nitrogen as NO ₂ -N mg/l			0.005	0.005	0.005	0.005	0.538	0.036					
8	Fecal Coliform(MPN/100ml)			-	22000	24000	7900	11000	7900					
9	Total Coliform(MPN/100ml)			-	92000	54000	14000	22000	17000					5000 or less MPN/100 ml
10	Fecal Streptococci MPN/100ml			-	-	-	-	>1601	151					
11	Turbidity(NTU)			10.26	10.1	1.32	2.42	0.77	8.1					
12	Phenolphthalein Alkalinity(mg/l)			BDL	BDL	BDL	BDL	BDL	BDL					
13	Total Alkalinity(mg/l)			72.0	78.0	112.0	70.0	80.0	94.0					
14	Chloride mg/l			70.4	101.8	31.5	37.0	31.99	48.4					
15	COD(mg/l)			BDL	6.0	12.0	4.0	10.0	10.0					
16	Ammonia mg/l			BDL	BDL	0.05	0.05	-	BDL					
17	Total Kjeldhal Nitrogen(mg/l)			-	-	-	-	8.68	-					
18	Hardness(mg/l)			118.0	102.0	86.0	98.0	72.0	112.0					
19	Calcium(mg/l)	The Lake was Dry	The Lake was Dry	19.2	21.6	74.0	31.3	24.05	34.5	The Lake was Dry	The Lake was Dry	The Lake was Dry	The Lake was Dry	
20	Magnesium(mg/l)			17	11.7	2.9	4.86	2.92	6.32					
21	Sulphate(mg/l)			183.5	9.4	17.9	40.7	15.38	15.75					
22	Sodium(mg/l)			87.6	25.1	-	-	61	-					
23	Total Dissolved Solids(mg/l)			121.0	161.0	159.0	200.0	179.0	272.0					
24	Total Fixed Solids(mg/l)			92.0	103.0	107.0	140.0	141.0	109.0					
25	Total Suspended Solid(mg/l)			22.0	22.0	24.0	30.0	110.0	11.0					
26	Phosphate(mg/l)			0.15	0.15	0.23	0.25	0.37	0.42					
27	Boron(mg/l)			0.2	-	0.58	-	1.01	-					
28	Potassium(mg/l)			7.1	3.3	-	-	5.9	-					
29	Fluoride(mg/l)			BDL	BDL	BDL	0.39	BDL	BDL					
30	Arsenic (mg/l)			-	-	-	-	BDL	-					
31	Cadmium(mg/l)			-	-	-	-	BDL	-					
32	Copper(mg/l)			-	-	-	-	0.962	-					
33	Lead(mg/l)			-	-	-	-	BDL	-					
34	Chromium(mg/l)			-	-	-	-	0.205	-					
35	Nickel(mg/l)			-	-	-	-	BDL	-					
36	Zinc(mg/l)			-	-	-	-	0.012	-					
37	Iron(mg/l)			-	-	-	-	0.152	-					
38	Manganese (mg/l)			-	-	-	-	-	-					

CURTORIM LAKE, CURTORIM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	32	36	27	29	27	29	29	30	30	30	29	30	
2	Dissolved Oxygen mg/l	-	-	5.7	4.5	5.3	4.7	3.1	4.1	4.2	4.1	3.9	5.9	4 mg/l or more
3	pH	6.65	6.6	7.3	6.3	6.1	6.6	6.7	6.8	6.8	6.7	7.0	7.0	6-9
4	Conductivity(µs/cm)	194	345	77	66	59	77	120	101	117	65	151	156	
5	BOD(mg/l)	-	-	BDL	BDL	BDL	BDL	-	BDL	2.8	2.1	-	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	1.16	BDL	0.3	0.36	0.1	0.1	0.26	BDL	0.36	0.1	0.21	0.21	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	0.005	0.005	0.005	0.005	BDL	BDL	0.005	0.005	0.13	0.005	
8	Fecal Coliform(MPN/100ml)	3300	2200	NA	1300	1700	4900	4900	2300	3300	3300	7000	1300	
9	Total Coliform(MPN/100ml)	7900	7000	NA	3500	3300	7900	7900	3300	4900	4900	9400	2300	5000 or less MPN/100 ml
10	Fecal Streptococci(MPN/100ml)	-	-	-	-	-	-	1601	27	71	431	95	>1601	
11	Turbidity(NTU)	43.6	102.0	1.64	7.46	4.47	1.01	22.6	2.88	3.41	10.07	4.05	5.53	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	12.0	20.0	26.0	34.0	32.0	40.0	48.0	54.0	48.0	50.0	36.0	58.0	
14	Chloride mg/l	44.52	88.1	10.7	17.5	21.0	10.0	15.0	13.5	12.3	20.5	20.6	18.0	
15	COD(mg/l)	26.0	16.0	10.0	12.0	4.0	8.0	34.0	4.0	10.0	6.0	9.0	8.0	
16	Ammonia mg/l	BDL	0.1	BDL	BDL	0.05	0.12	-	BDL	0.21	0.29	0.34	0.1	
17	Total Kjeldhal Nitrogen(mg/l)	-	-	-	-	-	-	5.32	-	-	-	-	-	
18	Hardness(mg/l)	36.0	54.0	16.0	16.0	20.0	46.0	26.0	28.0	56.0	42.0	40.0	50.0	
19	Calcium(mg/l)	10.42	8.82	14.0	12.0	3.21	10.0	7.0	7.21	18.0	8.82	6.4	10.0	
20	Magnesium(mg/l)	2.43	7.78	BDL	1.0	2.9	5.0	2.0	2.4	9.2	4.9	5.83	6.0	
21	Sulphate(mg/l)	8.50	21.9	6.0	10.3	3.21	3.0	3.3	3.88	7.32	3.5	BDL	BDL	
22	Sodium(mg/l)	33.4	62.4	6.1	0.2	-	-	21	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	119.0	231.0	43.0	41.0	36.0	45.0	80.0	63.0	70.0	43.0	93.0	90.0	
24	Total Fixed Solids(mg/l)	67.0	141.0	22.0	29.0	28.0	26.0	48.0	55.0	37.0	34.0	54.0	45.0	
25	Total Suspended Solid (mg/l)	36.0	161.0	14.0	16.0	8.0	16.0	74.0	12.0	49.0	10.0	12.0	38.0	
26	Phosphate(mg/l)	0.04	0.05	0.06	0.08	0.05	BDL	0.06	0.04	0.02	BDL	BDL	BDL	
27	Boron(mg/l)	BDL	0.46	4.65	3.98	1.3	-	1.02	-	-	-	-	-	
28	Potassium(mg/l)	9.5	10.3	0.9	0.1	-	-	7.2	-	-	-	-	-	
29	Fluoride(mg/l)	0.51	0.43	BDL	BDL	0.47	BDL	BDL	BDL	0.53	0.94	BDL	0.4	
30	Arsenic (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.014	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.855	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.311	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
37	Iron(mg/l)	2.42	-	-	-	-	-	0.323	-	-	-	-	-	

RIVER ZUARI AT MADKAI JETTY 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	30	30	28	27	29	29	31	30	30	31	29	
2	Dissolved Oxygen(mg/l)	4.6	5.5	5.3	7.4	7.1	5.1	5.6	5.0	6.7	7.1	5.3	5.2	4 mg/l or more
3	pH	7.2	7.4	7.5	6.8	6.0	7.4	7.51	7.5	7.8	7.6	7.4	7.6	6.5 - 8.5
4	Conductivity(µs/cm)	43660	43970	44930	891	-	38900	39660	47410	48250	55740	49260	54150	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	2.8	BDL	BDL	BDL	2.7	2.6	3.0	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.24	0.08	BDL	BDL	0.11	BDL	0.22	BDL	0.15	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.1	BDL	BDL	BDL	0.008	0.019	0.049	0.081	0.01	0.013	0.054	0.008	
8	Fecal Coliform(MPN/100ml)	330	130	130	1300	790	330	1700	2200	2300	1300	1300	2300	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	490	220	330	2300	2400	790	5400	4900	3300	2300	2300	4900	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	541	171	241	47	241	
11	Turbidity(NTU)	1.96	14.66	9.87	20.4	10.83	43.4	2.17	8.49	3.32	4.18	2.77	2.3	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	6.0	BDL	14.0	14.0	4.0	2.0	6.0	BDL	BDL	6.0	BDL	6.0	
13	Total Alkalinity(mg/l)	38.0	204.0	114.3	114.0	42.0	94.0	100.0	120.0	122.0	118.0	20.0	116.0	
14	Chlorides(mg/l)	18940.0	19244.0	18941.0	583.0	1651.0	14495.5	20368.0	16609.74	17245.0	16388.5	18994.0	18834.6	
15	COD(mg/l)	-	-	-	8.0	6.0	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	17.64	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	0.08	-	BDL	0.08	BDL	-	0.19	0.18	0.2	BDL	0.07	
18	Total Hardness(mg/l)	8000.0	9000.0	6400.0	100.0	156.0	5400.0	4780.0	6200.0	3740.0	6000.0	640.0	6000.0	
19	Calcium(mg/l)	1500.0	2204.0	481.0	12.0	15.0	481.0	280.6	1800.0	20.84	1843.0	256.5	2004.0	
20	Magnesium(mg/l)	1579.5	850.5	1264.0	17.0	29.0	1020.6	991.4	1069.2	782.5	340.2	987.0	243.0	
21	Sulphate(mg/l)	2358.9	681.5	3212.0	18.0	14.0	2615.6	2137.5	1835.43	1494.6	3361.4	991.34	3276.4	
22	Sodium(mg/l)	7394.0	10870	6694	184.8	-	-	3400.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	24004.0	25062.6	31451.0	605.0	1046.0	25297.0	23795.0	29560.1	31375.0	33329.0	28566.0	30086.0	
24	Total Fixed Solids(mg/l)	22316.0	24123.0	18871.0	242.0	420.0	19143.0	21755.0	18523.1	30369.0	25675.0	26557.0	24018.0	
25	Total Suspended Solids(mg/l)	36.0	152.0	73.0	83.0	34.0	19143.0	21.0	69.2	27.0	71.0	61.0	75.0	
26	Phosphate(mg/l)	0.93	0.19	0.47	2.93	0.05	0.23	0.28	0.15	0.09	0.05	0.09	0.13	
27	Boron(mg/l)	3.62	2.75	-	-	-	-	1.38	-	-	-	-	-	
28	Potassium(mg/l)	261.9	251	309.2	7.7	-	-	360	-	-	-	-	-	
29	Flouride(mg/l)	BDL	BDL	0.56	BDL	BDL	1.0	0.54	BDL	1.23	0.64	0.99	1.31	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	1.069	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.84	-	-	-	-	-	0.039	-	-	-	-	-	
37	IronTotal(mg/l)	1.32	-	-	-	-	-	0.081	-	-	-	-	-	

RIVER ZUARI AT BORIM BRIDGE 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	31	31	27	27	28	29	30	29	30	31	28	
2	Dissolved Oxygen(mg/l)	7.22	6.7	6.1	7.6	6.1	5.4	6.3	4.5	5.3	7.4	7.2	6.4	4 mg/l or more
3	pH	7.0	7.1	7.3	7.1	6.2	7.1	6.6	7.0	6.9	6.7	7.2	7.2	6.5 - 8.5
4	Conductivity(µs/cm)	24960	28160	27120	-	2372	11320	45580	26420	29920	31920	34750	36180	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.8	2.4	BDL	2.3	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.12	BDL	0.39	0.12	0.14	BDL	0.17	1.65	BDL	1.03	BDL	0.16	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.01	0.035	BDL	BDL	BDL	BDL	0.063	0.125	0.011	0.103	0.116	0.02	
8	Fecal Coliform(MPN/100ml)	130	130	2300	490	490	330	490	1300	2300	1700	1700	1100	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	230	490	4900	790	790	490	790	2300	3300	2700	2200	1700	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	16	>1601	18	24	24	
11	Turbidity(NTU)	3.81	9.53	30.7	11.9	4.92	9.71	1.13	2.31	12.44	8.59	5.71	2.79	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4.0	BDL	4.0	
13	Total Alkalinity(mg/l)	36.0	110.0	82.0	82.0	28.0	50.0	52.0	76.0	82.0	82.0	100.0	84.0	
14	Chlorides(mg/l)	10684.6	17774.5	2308.0	243.0	63.0	4148.7	2349.43	13841.45	10622.0	14431.7	4500.0	13453.2	
15	COD(mg/l)	-	-	-	6.0	4.0	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	12.6	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	0.05	BDL	BDL	0.07	BDL	-	0.05	0.12	0.1	BDL	0.09	
18	Total Hardness(mg/l)	4500.0	5000.0	3800.0	28.0	28.0	1000.0	660.0	4600.0	3220.0	4800.0	160.0	5000.0	
19	Calcium(mg/l)	1500.0	1202.4	256.0	5.0	6.0	160.3	72.14	1400.0	20.84	1042.1	64.13	1202.4	
20	Magnesium(mg/l)	729.0	486.0	768.0	4.0	3.0	145.8	116.6	777.6	656.1	534.6	238.1	486.0	
21	Sulphate(mg/l)	1874	340.8	2606.0	8.0	5.0	453.1	100.5	2139.75	984.4	3757.6	258.0	3618.2	
22	Sodium(mg/l)	3945.0	6671.0	4338.0	43.4	-	-	1040.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	14100.0	21010.0	18984.0	143.0	161.0	7031.0	27378.0	15886.0	19549.0	18133.0	20898.0	19959.0	
24	Total Fixed Solids(mg/l)	12018.0	18810.0	11390.0	55.0	65.0	5339.0	25380.0	13216.0	17544.0	14995.0	18810.0	14994.0	
25	Total Suspended Solids(mg/l)	21.0	38.0	60.0	31.0	18.0	34.0	28.0	59.0	28.0	63.0	56.0	66.0	
26	Phosphate(mg/l)	0.83	0.12	0.35	0.2	0.03	0.08	1.044	0.12	0.37	0.12	0.03	0.23	
27	Boron(mg/l)	3.03	2.52	-	-	-	-	1.8	-	-	-	-	-	
28	Potassium(mg/l)	168.8	172.2	201.4	2.5	-	-	31	-	-	-	-	-	
29	Flouride(mg/l)	BDL	BDL	0.46	BDL	BDL	0.59	1.88	BDL	1.33	0.53	0.2	1.06	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.779	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.84	-	-	-	-	-	0.021	-	-	-	-	-	
37	IronTotal(mg/l)	1.32	-	-	-	-	-	0.327	-	-	-	-	-	

CARAMBOLIM LAKE 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	30	28	26	27	28	29	30	31	28	28	31	
2	Dissolved Oxygen mg/l	6.0	8.2	6.0	8.2	7.5	6.0	-	7.5	4.8	7.2	6.2	8.0	4 mg/l or more
3	pH	7.62	7.5	7.5	6.2	6.4	7.1	7.13	7.8	7.1	7.5	7.4	8.1	6-9
4	Conductivity(µs/cm)	233	254	255	88	29	1403	148	12045	142	157	279	241	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	-	3.0	BDL	BDL	2.3	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	2.07	0.24	0.48	BDL	BDL	0.6	BDL	0.28	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.013	BDL	0.079	0.007	0.007	BDL	BDL	0.006	0.007	0.1	BDL	0.01	
8	Fecal Coliform(MPN/100ml)	1300	1300	-	170	1700	330	1300	1300	1300	2300	1300	490	
9	Total Coliform(MPN/100ml)	2300	2300	-	490	5400	490	2200	2300	2300	4900	3300	1300	5000 or less MPN/100 ml
10	Fecal Streptococci(MPN/100ml)	-	-	-	-	-	-	64	171	27	10	24	541	
11	Turbidity(NTU)	4.72	7.87	7.4	3.73	5.2	2.05	1.36	2.44	1.47	2.82	6.4	3.75	
12	Phenolphthalein Alkalinity(mg/l)	BDL	8.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	106.0	68.0	42.0	24.0	38.0	40.0	54.0	62.0	60.0	22.0	66.0	62.0	
14	Chloride mg/l	40.49	46.0	44.5	12.0	12.0	10.0	10.5	15.54	84.0	2.4	750.0	112.0	
15	COD(mg/l)	8.0	8.0	20.0	16.0	14.0	12.0	10.0	8.0	8.0	10.0	8.0	20.0	
16	Ammonia mg/l	0.07	0.17	0.54	0.15	BDL	-	-	BDL	0.08	0.08	0.41	BDL	
17	Total Kjeldhal Nitrogen(mg/l)	-	-	-	-	-	-	7.56	-	-	-	-	-	
18	Hardness(mg/l)	85.0	68.0	60.0	60.0	36.0	60.0	38.0	42.0	34.0	36.0	58.0	52.0	
19	Calcium(mg/l)	25.0	23.0	15.2	15.2	10.0	15.0	14.43	38.0	11.22	16.0	19.24	12.8	
20	Magnesium(mg/l)	14.58	2.4	5.3	5.3	6.0	5.0	0.49	BDL	BDL	4.9	2.4	4.9	
21	Sulphate(mg/l)	22.15	7.0	6.69	16.8	2.0	7.0	5.53	6.31	BDL	4.53	9.34	157.0	
22	Sodium(mg/l)	31.7	44.7	34.5	4.5	-	-	370	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	235.0	157.0	198.0	38.0	16.0	95.0	88.0	73.75	93.0	94.0	165.0	151.0	
24	Total Fixed Solids(mg/l)	84.0	67.0	145.0	26.0	9.0	38.0	73.0	42.0	75.0	57.0	150.0	79.0	
25	Total Suspended Solid (mg/l)	64.0	50.0	14.0	12.0	41.0	3.0	3.0	6.0	12.0	13.0	12.0	18.0	
26	Phosphate(mg/l)	0.044	0.05	0.13	0.1	0.02	0.02	0.12	0.16	0.03	0.1	0.04	0.05	
27	Boron(mg/l)	0.54	0.26	0.24	0.24	-	-	1.11	-	-	-	-	-	
28	Potassium(mg/l)	4.8	6.4	5.5	0.4	-	-	3.1	-	-	-	-	-	
29	Fluoride(mg/l)	2.7	-	0.7	0.58	BDL	0.12	BDL	BDL	BDL	0.45	BDL	-	
30	Arsenic (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.011	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.836	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.369	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
37	Iron(mg/l)	0.15	-	-	-	-	-	0.209	-	-	-	-	-	

ANJUNEM LAKE 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	31	28	27	29	28	30	30	29	30	30	29	
2	Dissolved Oxygen mg/l	7.3	7.5	-	7.0	8.6	8.2	7.3	8.2	7.2	7.7	7.0	7.7	4 mg/l or more
3	pH	6.98	6.6	6.4	6.4	7.4	7.1	7.31	7.8	7.7	7.3	7.4	7.0	6-9
4	Conductivity(µs/cm)	176	98	58	46	40	36	48	51	76	54	61	78	
5	BOD(mg/l)	BDL	1.5	BDL	BDL	BDL	BDL	2.0	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.48	0.18	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	0.01	BDL	BDL	BDL	0.04	BDL	BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	23	Nil	-	33	23	23	13	110	220	33	540	23	
9	Total Coliform(MPN/100ml)	79	4.5	-	170	79	79	49	170	540	79	920	49	5000 or less MPN/100 ml
10	Fecal Streptococci MPN/100ml	-	-	-	-	-	-	71	13	33	22	25	8	
11	Turbidity(NTU)	5.25	2.92	2.58	3.37	1.41	1.36	BDL	BDL	BDL	BDL	BDL	BDL	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	30.0	44.0	18.0	18.0	34.0	22.0	20.0	24.0	24.0	26.0	24.0	22.0	
14	Chloride mg/l	16.5	11.5	10.3	6.85	6.9	3.4	4.89	4.86	12.72	5.0	7.7	15.3	
15	COD(mg/l) mg/l	6.0	14.0	4.0	6.0	4.0	6.0	8.0	8.0	8.0	4.0	6.0	9.0	
16	Ammonia mg/l	0.2	BDL	BDL	BDL	BDL	0.05	-	0.05	0.08	0.09	0.1	0.09	
17	Total Kjeldhal Nitrogen(mg/l)	-	-	-	-	-	-	6.44	-	-	-	-	-	
18	Hardness(mg/l)	80.0	48.0	24.0	22.0	18.0	14.0	12.0	24.0	14.0	22.0	14.0	26.0	
19	Calcium(mg/l)	21.64	16.03	7.21	4.81	6.0	4.0	3.2	20	4.8	6.0	2.4	8.0	
20	Magnesium(mg/l)	6.32	BDL	BDL	2.43	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4.4	
21	Sulphate(mg/l)	2.2	BDL	BDL	BDL	2.0	2.0	4.91	5.45	5.23	BDL	BDL	3.36	
22	Sodium(mg/l)	9.6	15	1.4	2.3	-	-	28	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	98.0	56.0	36.0	30.0	24.0	23.0	33.0	26.6	45.0	39.0	41.0	51.0	
24	Total Fixed Solids(mg/l)	73.0	43.0	18.0	14.0	11.0	7.0	20.0	16.2	18.0	23.0	24.0	36.0	
25	Total Suspended Solid (mg/l)	16.0	18.0	8.0	7.0	21.0	8.0	12.0	12.0	20.0	10.0	8.0	14.0	
26	Phosphate(mg/l)	0.25	BDL	0.07	0.14	BDL	BDL	0.051	0.04	BDL	BDL	BDL	0.05	
27	Boron(mg/l)	1.77	1.33	BDL	BDL	-	-	1.11	-	-	-	-	-	
28	Potassium(mg/l)	2.4	10.1	0.1	0.3	-	-	0.55	-	-	-	-	-	
29	Fluoride(mg/l)	-	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2	BDL	
30	Arsenic (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.973	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.177	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
37	Iron(mg/l)	5.35	-	-	-	-	-	0.261	-	-	-	-	-	

BOREWELL/TUBE WELL/ OPEN WELL IN ZUARI INDUSTRIES LTD, ZUARINAGAR 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class A as per CPCB classification based on designated best use
1	Temperature°C	-	-	-	-	-	-	-	-	-	-	-	-	
2	Dissolved Oxygen mg/l	-	-	-	-	-	-	-	-	-	-	-	-	6 mg/l or more
3	pH	-	-	-	-	-	-	-	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	-	-	-	-	-	-	-	-	-	-	-	-	
5	BOD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	-	-	-	-	-	-	-	-	-	-	-	-	
8	Fecal Coliform(MPN/100ml)	-	-	-	-	-	-	-	-	-	-	-	-	
9	Total Coliform(MPN/100ml)	-	-	-	-	-	-	-	-	-	-	-	-	50 or less MPN/100 ml
10	Fecal Streptococci MPN/100ml	-	-	-	-	-	-	-	-	-	-	-	-	
11	Turbidity(NTU)	-	-	-	-	-	-	-	-	-	-	-	-	
12	Phenolphthalein Alkalinity(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
13	Total Alkalinity(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
14	Chloride mg/l	-	-	-	-	-	-	-	-	-	-	-	-	
15	COD(mg/l) mg/l	-	-	-	-	-	-	-	-	-	-	-	-	
16	Ammonia mg/l	-	-	-	-	-	-	-	-	-	-	-	-	
17	Total Kjeldhal Nitrogen(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
18	Hardness(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
19	Calcium(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
20	Magnesium(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
21	Sulphate(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
22	Sodium(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
24	Total Fixed Solids(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
25	Total Suspended Solid (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
26	Phosphate(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
27	Boron(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
28	Potassium(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
29	Fluoride(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
30	Arsenic (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
31	Cadmium(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
32	Copper(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
33	Lead(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
34	Chromium(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
35	Nickel(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
36	Zinc(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
37	Iron(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
38	Manganese (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	

Sample not collected as Borewell was dismantled

Sample not collected as Borewell was dismantled

BOREWELL/TUBE WELL/ OPEN WELL AT VERNA INDUSTRIAL ESTATE 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class A as per CPCB classification based on designated best use
1	Temperature°C	30	-	-	-	-	-	28	-	-	-	-	-	
2	Dissolved Oxygen(mg/l)	5.2	-	-	-	-	-	7.9	-	-	-	-	-	6 mg/l or more
3	pH	6.2	-	-	-	-	-	6.5	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	307	-	-	-	-	-	64	-	-	-	-	-	
5	BOD(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	2.89	-	-	-	-	-	0.42	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
8	Fecal Coliform(MPN/100ml)	<1.8	-	-	-	-	-	13	-	-	-	-	-	
9	Total Coliform(MPN/100ml)	Nil	-	-	-	-	-	130	-	-	-	-	-	50 or less MPN/100 ml
10	Fecal Streptococci MPN/100ml	-	-	-	-	-	-	11	-	-	-	-	-	
11	Turbidity(NTU)	BDL	-	-	-	-	-	5.15	-	-	-	-	-	
12	Phenolphthalein Alkalinity(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
13	Total Alkalinity(mg/l)	10.0	-	-	-	-	-	24.0	-	-	-	-	-	
14	Chlorides(mg/l)	40.6	-	-	-	-	-	6.0	-	-	-	-	-	
15	COD(mg/l)	BDL	-	-	-	-	-	6.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	7.84	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	-	-	-	-	-	-	-	-	-	-	-	
18	Total Hardness(mg/l)	96.0	-	-	-	-	-	20.0	-	-	-	-	-	
19	Calcium(mg/l)	23.25	-	-	-	-	-	5.0	-	-	-	-	-	
20	Magnesium(mg/l)	9.23	-	-	-	-	-	2.0	-	-	-	-	-	
21	Sulphate(mg/l)	25.65	-	-	-	-	-	3.44	-	-	-	-	-	
22	Sodium(mg/l)	33.9	-	-	-	-	-	10.6	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	181.0	-	-	-	-	-	40.0	-	-	-	-	-	
24	Total Fixed Solids(mg/l)	99.0	-	-	-	-	-	24.0	-	-	-	-	-	
25	Total Suspended Solids(mg/l)	11.0	-	-	-	-	-	2.0	-	-	-	-	-	
26	Phosphate(mg/l)	BDL	-	-	-	-	-	0.23	-	-	-	-	-	
27	Boron(mg/l)	0.34	-	-	-	-	-	BDL	-	-	-	-	-	
28	Potassium(mg/l)	3.3	-	-	-	-	-	2.4	-	-	-	-	-	
29	Flouride(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.662	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.133	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.04	-	-	-	-	-	BDL	-	-	-	-	-	
37	IronTotal(mg/l)	2.22	-	-	-	-	-	0.105	-	-	-	-	-	

BOREWELL/ TUBE WELL/ OPEN WELL KUNDAIM INDUSTRIAL ESTATE 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class A as per CPCB classification based on designated best use
1	Temperature°C	30	-	-	-	-	-	29	-	-	-	-	-	
2	Dissolved Oxygen(mg/l)	6.5	-	-	-	-	-	3.8	-	-	-	-	-	6 mg/l or more
3	pH	6.5	-	-	-	-	-	6.0	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	238	-	-	-	-	-	110	-	-	-	-	-	
5	BOD(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.097	-	-	-	-	-	0.891	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.002	-	-	-	-	-	0.069	-	-	-	-	-	
8	Fecal Coliform(MPN/100ml)	Nil	-	-	-	-	-	Nil	-	-	-	-	-	
9	Total Coliform(MPN/100ml)	7.8	-	-	-	-	-	<1.8	-	-	-	-	-	50 or less MPN/100 ml
10	Fecal Streptococci MPN/100ml	-	-	-	-	-	-	15	-	-	-	-	-	
11	Turbidity(NTU)	9.45	-	-	-	-	-	1.64	-	-	-	-	-	
12	Phenolphthalein Alkalinity(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
13	Total Alkalinity(mg/l)	16.0	-	-	-	-	-	32.0	-	-	-	-	-	
14	Chlorides(mg/l)	17.99	-	-	-	-	-	14.0	-	-	-	-	-	
15	COD(mg/l)	8.0	-	-	-	-	-	4.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	8.12	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	-	-	-	-	-	-	-	-	-	-	-	
18	Total Hardness(mg/l)	70.0	-	-	-	-	-	16.0	-	-	-	-	-	
19	Calcium(mg/l)	40.0	-	-	-	-	-	4.01	-	-	-	-	-	
20	Magnesium(mg/l)	7.29	-	-	-	-	-	1.46	-	-	-	-	-	
21	Sulphate(mg/l)	34.87	-	-	-	-	-	1.34	-	-	-	-	-	
22	Sodium(mg/l)	16.4	-	-	-	-	-	170.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	613.0	-	-	-	-	-	65.0	-	-	-	-	-	
24	Total Fixed Solids(mg/l)	49.0	-	-	-	-	-	52.0	-	-	-	-	-	
25	Total Suspended Solids(mg/l)	2.0	-	-	-	-	-	4.0	-	-	-	-	-	
26	Phosphate(mg/l)	0.17	-	-	-	-	-	BDL	-	-	-	-	-	
27	Boron(mg/l)	0.56	-	-	-	-	-	0.91	-	-	-	-	-	
28	Potassium(mg/l)	7.4	-	-	-	-	-	6.4	-	-	-	-	-	
29	Flouride(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.016	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.74	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.242	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.06	-	-	-	-	-	0.032	-	-	-	-	-	
37	IronTotal(mg/l)	0.34	-	-	-	-	-	0.219	-	-	-	-	-	

BORE WELL/ TUBE WELL / OPENWELL IN CORLIM INDUSTRIAL ESTATE 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class A as per CPCB classification based on designated best use
1	Temperature°C	31	-	-	-	-	-	29	-	-	-	-	-	
2	Dissolved Oxygen(mg/l)	7.0	-	-	-	-	-	6.3	-	-	-	-	-	6 mg/l or more
3	pH	6.5	-	-	-	-	-	7.39	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	97	-	-	-	-	-	107	-	-	-	-	-	
5	BOD(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.062	-	-	-	-	-	1.093	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	-	-	-	-	-	0.006	-	-	-	-	-	
8	Fecal Coliform(MPN/100ml)	Nil	-	-	-	-	-	Nil	-	-	-	-	-	
9	Total Coliform(MPN/100ml)	<1.8	-	-	-	-	-	4.5	-	-	-	-	-	50 or less MPN/100 ml
10	Fecal Streptococci MPN/100ml	-	-	-	-	-	-	70	-	-	-	-	-	
11	Turbidity(NTU)	9.2	-	-	-	-	-	0.37	-	-	-	-	-	
12	Phenolphthalein Alkalinity(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
13	Total Alkalinity(mg/l)	10.0	-	-	-	-	-	8.0	-	-	-	-	-	
14	Chlorides(mg/l)	32.99	-	-	-	-	-	11.0	-	-	-	-	-	
15	COD(mg/l)	6.0	-	-	-	-	-	4.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	8.68	-	-	-	-	-	
17	Ammonia (mg/l)	1.02	-	-	-	-	-	-	-	-	-	-	-	
18	Total Hardness(mg/l)	30.0	-	-	-	-	-	4.0	-	-	-	-	-	
19	Calcium(mg/l)	7.0	-	-	-	-	-	0.8	-	-	-	-	-	
20	Magnesium(mg/l)	5.59	-	-	-	-	-	0.49	-	-	-	-	-	
21	Sulphate(mg/l)	2.12	-	-	-	-	-	0.44	-	-	-	-	-	
22	Sodium(mg/l)	17.8	-	-	-	-	-	64.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	142.0	-	-	-	-	-	59.0	-	-	-	-	-	
24	Total Fixed Solids(mg/l)	40.0	-	-	-	-	-	47.0	-	-	-	-	-	
25	Total Suspended Solids(mg/l)	2.0	-	-	-	-	-	BDL	-	-	-	-	-	
26	Phosphate(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
27	Boron(mg/l)	BDL	-	-	-	-	-	0.9	-	-	-	-	-	
28	Potassium(mg/l)	2.3	-	-	-	-	-	1.2	-	-	-	-	-	
29	Flouride(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.012	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	1.106	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.253	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.03	-	-	-	-	-	0.04	-	-	-	-	-	
37	IronTotal(mg/l)	BDL	-	-	-	-	-	0.3	-	-	-	-	-	

BORE WELL/TUBE WELL/ OPEN WELL IN CUNCOLIM INDUSTRIAL ESTATE 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class A as per CPCB classification based on designated best use
1	Temperature°C	30	-	-	-	-	-	28	-	-	-	-	-	
2	Dissolved Oxygen(mg/l)	5.0	-	-	-	-	-	2.0	-	-	-	-	-	6 mg/l or more
3	pH	6.9	-	-	-	-	-	7.7	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	40	-	-	-	-	-	98	-	-	-	-	-	
5	BOD(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.02	-	-	-	-	-	BDL	-	-	-	-	-	
8	Fecal Coliform(MPN/100ml)	Nil	-	-	-	-	-	23	-	-	-	-	-	
9	Total Coliform(MPN/100ml)	<1.8	-	-	-	-	-	79	-	-	-	-	-	50 or less MPN/100 ml
10	Turbidity(NTU)	2.56	-	-	-	-	-	4.25	-	-	-	-	-	
11	Phenolphthalein Alkalinity(mg/l)	BDL	-	-	-	-	-	4.0	-	-	-	-	-	
12	Total Alkalinity(mg/l)	50.0	-	-	-	-	-	146.0	-	-	-	-	-	
13	Chlorides(mg/l)	25.4	-	-	-	-	-	35.5	-	-	-	-	-	
14	COD(mg/l)	4.0	-	-	-	-	-	12.0	-	-	-	-	-	
15	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	9.24	-	-	-	-	-	
16	Ammonia (mg/l)	0.09	-	-	-	-	-	-	-	-	-	-	-	
17	Total Hardness(mg/l)	158.0	-	-	-	-	-	30.0	-	-	-	-	-	
18	Calcium(mg/l)	39.28	-	-	-	-	-	7.21	-	-	-	-	-	
19	Magnesium(mg/l)	14.27	-	-	-	-	-	2.9	-	-	-	-	-	
20	Sulphate(mg/l)	7.0	-	-	-	-	-	6.74	-	-	-	-	-	
21	Sodium(mg/l)	12.9	-	-	-	-	-	80.0	-	-	-	-	-	
22	Total Dissolved Solids(mg/l)	25.0	-	-	-	-	-	60.0	-	-	-	-	-	
23	Total Fixed Solids(mg/l)	15.0	-	-	-	-	-	52.0	-	-	-	-	-	
24	Total Suspended Solids(mg/l)	31.0	-	-	-	-	-	17.0	-	-	-	-	-	
25	Phosphate(mg/l)	0.15	-	-	-	-	-	0.106	-	-	-	-	-	
26	Boron(mg/l)	BDL	-	-	-	-	-	0.92	-	-	-	-	-	
27	Potassium(mg/l)	3.1	-	-	-	-	-	4.2	-	-	-	-	-	
28	Flouride(mg/l)	-	-	-	-	-	-	0.91	-	-	-	-	-	
29	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
30	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Copper(mg/l)	BDL	-	-	-	-	-	0.017	-	-	-	-	-	
32	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
33	Chromium(mg/l)	BDL	-	-	-	-	-	0.061	-	-	-	-	-	
34	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	IronTotal(mg/l)	0.26	-	-	-	-	-	BDL	-	-	-	-	-	

BOREWELL/TUBE WELL/OPEN WELL IN BETHORA INDUSTRIAL ESTATE 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class A as per CPCB classification based on designated best use
1	Temperature°C	29	-	-	-	-	-	28	-	-	-	-	-	
2	Dissolved Oxygen(mg/l)	5.7	-	-	-	-	-	2.9	-	-	-	-	-	6 mg/l or more
3	pH	6.5	-	-	-	-	-	6.9	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	120	-	-	-	-	-	142	-	-	-	-	-	
5	BOD(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.47	-	-	-	-	-	1.60	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.36	-	-	-	-	-	0.223	-	-	-	-	-	
8	Fecal Coliform(MPN/100ml)	Nil	-	-	-	-	-	Nil	-	-	-	-	-	
9	Total Coliform(MPN/100ml)	<1.8	-	-	-	-	-	<1.8	-	-	-	-	-	50 or less MPN/100 ml
10	Turbidity(NTU)	BDL	-	-	-	-	-	1.1	-	-	-	-	-	
11	Phenolphthalein Alkalinity(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
12	Total Alkalinity(mg/l)	28.0	-	-	-	-	-	62.0	-	-	-	-	-	
13	Chlorides(mg/l)	19.43	-	-	-	-	-	22.5	-	-	-	-	-	
14	COD(mg/l)	8.0	-	-	-	-	-	12.0	-	-	-	-	-	
15	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	9.8	-	-	-	-	-	
16	Ammonia (mg/l)	BDL	-	-	-	-	-	-	-	-	-	-	-	
17	Total Hardness(mg/l)	78.0	-	-	-	-	-	42.0	-	-	-	-	-	
18	Calcium(mg/l)	40.0	-	-	-	-	-	11.22	-	-	-	-	-	
19	Magnesium(mg/l)	9.2	-	-	-	-	-	3.4	-	-	-	-	-	
20	Sulphate(mg/l)	3.25	-	-	-	-	-	BDL	-	-	-	-	-	
21	Sodium(mg/l)	1.9	-	-	-	-	-	33.0	-	-	-	-	-	
22	Total Dissolved Solids(mg/l)	68.0	-	-	-	-	-	87.0	-	-	-	-	-	
23	Total Fixed Solids(mg/l)	49.0	-	-	-	-	-	77.0	-	-	-	-	-	
24	Total Suspended Solids(mg/l)	18.0	-	-	-	-	-	9.0	-	-	-	-	-	
25	Phosphate(mg/l)	0.90	-	-	-	-	-	BDL	-	-	-	-	-	
26	Boron(mg/l)	0.53	-	-	-	-	-	1.06	-	-	-	-	-	
27	Potassium(mg/l)	0.9	-	-	-	-	-	0.49	-	-	-	-	-	
28	Flouride(mg/l)	BDL	-	-	-	-	-	0.63	-	-	-	-	-	
29	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
30	Cadmium(mg/l)	BDL	-	-	-	-	-	0.010	-	-	-	-	-	
31	Copper(mg/l)	BDL	-	-	-	-	-	1.141	-	-	-	-	-	
32	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
33	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Zinc(mg/l)	2.19	-	-	-	-	-	3.769	-	-	-	-	-	
36	IronTotal(mg/l)	0.87	-	-	-	-	-	0.209	-	-	-	-	-	

BOREWELL/ TUBEWELL/OPENWELL IN MADKAI INDUSTRIAL ESTATE 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for Class A as per CPCB classification based on designated best use
1	Temperature°C	30	-	-	-	-	-	29	-	-	-	-	-	
2	Dissolved Oxygen(mg/l)	6.4	-	-	-	-	-	6.8	-	-	-	-	-	6 mg/l or more
3	pH	7.1	-	-	-	-	-	6.6	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	67	-	-	-	-	-	64.23	-	-	-	-	-	
5	BOD(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.78	-	-	-	-	-	0.16	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
8	Fecal Coliform(MPN/100ml)	Nil	-	-	-	-	-	Nil	-	-	-	-	-	
9	Total Coliform(MPN/100ml)	<1.8	-	-	-	-	-	<1.8	-	-	-	-	-	50 or less MPN/100 ml
10	Fecal Streptococci(MPN/100ml)	-	-	-	-	-	-	-	-	-	-	-	-	
11	Turbidity(NTU)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
12	Phenolphthalein Alkalinity(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
13	Total Alkalinity(mg/l)	10.0	-	-	-	-	-	24.0	-	-	-	-	-	
14	Chlorides(mg/l)	14.57	-	-	-	-	-	80.0	-	-	-	-	-	
15	COD(mg/l)	10.0	-	-	-	-	-	11.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	10.92	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	-	-	-	-	-	-	-	-	-	-	-	
18	Total Hardness(mg/l)	26.0	-	-	-	-	-	186.0	-	-	-	-	-	
19	Calcium(mg/l)	10.0	-	-	-	-	-	9.62	-	-	-	-	-	
20	Magnesium(mg/l)	3.9	-	-	-	-	-	29.4	-	-	-	-	-	
21	Sulphate(mg/l)	4.48	-	-	-	-	-	54.32	-	-	-	-	-	
22	Sodium(mg/l)	10.0	-	-	-	-	-	17.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	43.0	-	-	-	-	-	40.0	-	-	-	-	-	
24	Total Fixed Solids(mg/l)	21.0	-	-	-	-	-	34.0	-	-	-	-	-	
25	Total Suspended Solids(mg/l)	14.0	-	-	-	-	-	7.0	-	-	-	-	-	
26	Phosphate(mg/l)	0.86	-	-	-	-	-	0.121	-	-	-	-	-	
27	Boron(mg/l)	BDL	-	-	-	-	-	1.05	-	-	-	-	-	
28	Potassium(mg/l)	1.4	-	-	-	-	-	0.49	-	-	-	-	-	
29	Flouride(mg/l)	BDL	-	-	-	-	-	0.85	-	-	-	-	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.049	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	1.19	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.171	-	-	-	-	-	
37	IronTotal(mg/l)	0.27	-	-	-	-	-	0.349	-	-	-	-	-	

MIRAMAR BEACH 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	29	27	26	27	29	31	32	31	29	29	30	
2	Dissolved Oxygen(mg/l)	6.0	6.0	5.8	7.6	7.1	6.3	6.4	6.0	6.9	7.0	6.9	6.3	4 mg/l or more
3	pH	7.8	7.8	8.3	6.3	7.2	7.9	7.7	7.8	8.1	7.9	7.9	7.9	6.5 - 8.5
4	Conductivity(µs/cm)	48240	47520	31280	2037	4417	42600	45500	57350	57300	58450	52110	50800	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	2.2	BDL	2.8	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.064	0.07	0.7	BDL	0.18	BDL	0.164	1.65	BDL	BDL	BDL	0.17	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.03	0.12	0.06	0.137	0.01	BDL	BDL	0.049	0.008	BDL	BDL	0.008	
8	Fecal Coliform(MPN/100ml)	13	33	-	790	1300	130	79	240	130	130	110	70	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	33	130	-	1700	2200	350	240	540	240	240	350	170	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	351	13	22	151	34	64	
11	Turbidity(NTU)	4.69	15.21	8.43	37.1	35.1	3.65	1.07	7.55	6.46	4.33	6.21	6.23	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	16.0	BDL	BDL	BDL	6.0	16.0	16.0	12.0	14.0	12.0	12.0	
13	Total Alkalinity(mg/l)	16.0	114.0	80.0	36.0	66.0	102.0	108.0	118.0	118.0	122.0	122.0	120.0	
14	Chlorides(mg/l)	19368.99	19305.0	16369.0	12871.0	6262.0	16804.0	19119.07	19183.77	20743.6	19548.0	21525.2	16927.0	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	13.16	-	-	-	-	-	
17	Ammonia (mg/l)	0.03	0.21	0.11	0.08	BDL	-	-	0.05	0.17	0.05	0.05	0.16	
18	Total Hardness(mg/l)	3400.0	7400.0	5000.0	5000.0	2400.0	4800.0	6000.0	7000.0	6600.0	6000.0	8000.0	8200.0	
19	Calcium(mg/l)	1000.0	641.0	601.2	601.0	401.0	361.0	BDL	600.0	5.61	3800	101.6	1042.0	
20	Magnesium(mg/l)	583.2	1409.0	850.5	850.5	340.0	947.0	1215.0	1555.2	1263.6	534.6	1458.0	1361.0	
21	Sulphate(mg/l)	1876.64	3360.0	976.5	1023.0	316.0	2662.0	1835.94	2163.53	1752.8	14.0	1766.0	1256.0	
22	Sodium(mg/l)	6118.0	9512.0	3926.0	314.5	-	-	180.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	30771.0	33597.0	21999.0	1517.0	2613.0	29820.0	31868.0	34410.0	37282.0	34485.0	30036.0	31289.0	
24	Total Fixed Solids(mg/l)	3315.3	23227.0	21609.0	1117.0	889.0	17892.0	24078.0	23216.1	35282.0	23832.0	20023.0	21232.0	
25	Total Suspended Solids(mg/l)	228.0	76.0	122.0	122.0	88.0	69.0	114.0	120.0	122.0	43.0	68.0	61.0	
26	Phosphate(mg/l)	BDL	BDL	0.06	0.1	BDL	0.08	0.06	0.11	0.06	0.07	0.06	BDL	
27	Boron(mg/l)	1.92	2.39	0.41	0.37	-	-	2.3	-	-	-	-	-	
28	Potassium(mg/l)	221.8	345.5	182.4	15.5	-	-	500	-	-	-	-	-	
29	Flouride(mg/l)	2.16	-	0.56	0.56	0.49	1.49	1.26	2.69	BDL	1.53	0.66	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.02	-	-	-	-	-	0.017	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.765	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.296	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.056	-	-	-	-	-	
37	IronTotal(mg/l)	0.12	-	-	-	-	-	1.143	-	-	-	-	-	

MOBOR BEACH 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	31	27	28	30	30	32	32	30	30	31	30	
2	Dissolved Oxygen(mg/l)	5.7	6.2	6.7	6.9	5.5	5.7	6.4	6.1	6.6	7.1	7.1	6.4	4 mg/l or more
3	pH	8.1	8.0	7.4	7.4	7.9	7.4	8.0	7.8	7.7	7.9	7.9	7.9	6.5 - 8.5
4	Conductivity(µs/cm)	48130	47480	35110	34780	45620	33546	53160	54330	54980	57790	55380	57550	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	2.4	BDL	BDL	BDL	BDL	2.4	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.23	0.31	BDL	BDL	BDL	BDL	BDL	0.18	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.01	BDL	BDL	0.017	BDL	BDL	0.007	0.079	0.017	0.018	0.02	
8	Fecal Coliform(MPN/100ml)	49	8	-	1100	130	79	79	240	130	79	170	130	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	130	23	-	3500	330	240	240	350	240	240	350	220	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	>1601	221	71	16	4	6	
11	Turbidity(NTU)	2.3	16.59	7.54	9.45	BDL	2.15	BDL	1.28	BDL	3.2	2.62	1.56	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	10.0	18.0	4.0	2.0	4.0	4.0	16.0	14.0	10.0	16.0	12.0	18.0	
13	Total Alkalinity(mg/l)	120.0	136.0	114.0	90.0	134.0	140.0	128.0	120.0	108.0	120.0	124.0	112.0	
14	Chlorides(mg/l)	18994.0	19119.1	18593.0	13597.8	14290.0	17745.0	18994.11	18834.6	21855.0	18835.0	19548.0	19730.0	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	15.96	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	0.32	BDL	BDL	BDL	BDL	-	0.1	BDL	0.1	0.11	BDL	
18	Total Hardness(mg/l)	7200.0	10000.0	1600.0	22600.0	13800.0	6600.0	6500.0	5000.0	6760.0	7800.0	11500.0	8400.0	
19	Calcium(mg/l)	2405.0	801.6	400.8	5450.9	2200.0	1202.4	801.16	320.6	449.0	561.0	4000.0	561.0	
20	Magnesium(mg/l)	291.6	850.5	145.8	2187.0	2818.0	874.8	1093.5	1020.6	1370.0	1555.0	1822.5	1701.0	
21	Sulphate(mg/l)	1981.3	2507.8	1266.0	1784.0	2307.8	611.1	2828.13	3502.9	2681.0	2969.0	2760.7	1097.0	
22	Sodium(mg/l)	8304.0	11795.0	5234.0	3978.0	-	-	6900.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	26412.0	32761.0	22119.0	22607.0	26916.0	33546.0	37206.0	32003.0	38486.0	34037.0	34889.0	34180.0	
24	Total Fixed Solids(mg/l)	25412.0	25553.0	22009.0	20388.0	21624.0	30370.0	28064.0	25995.0	23092.0	17462.0	25174.0	17004.0	
25	Total Suspended Solids(mg/l)	130.0	112.0	15.0	19.0	79.0	95.0	138.0	120.0	45.0	46.0	51.0	158.0	
26	Phosphate(mg/l)	0.071	0.31	0.14	0.09	0.13	0.15	0.07	0.11	0.03	0.03	0.18	0.1	
27	Boron(mg/l)	2.41	1.92	2.57	-	3.55	-	2.3	-	-	-	-	-	
28	Potassium(mg/l)	290.4	258.9	216.2	180.0	-	-	260	-	-	-	-	-	
29	Flouride(mg/l)	BDL	0.63	0.91	0.85	6.53	1.48	1.31	0.76	BDL	0.67	1.9	-	
30	Arsenic (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.01	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.918	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.188	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.094	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.04	-	-	-	-	-	0.028	-	-	-	-	-	
37	Iron(mg/l)	0.10	-	-	-	-	-	0.204	-	-	-	-	-	

BAINA BEACH 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	32	28	28	30	30	28	30	30	31	30	30	
2	Dissolved Oxygen(mg/l)	6.2	6.1	6.7	6.3	4.2	4.6	6.0	6.0	6.9	6.1	6.4	6.5	4 mg/l or more
3	pH	8.0	7.9	7.4	7.4	7.9	7.8	7.8	7.8	7.7	8.0	7.9	8.0	6.5 - 8.5
4	Conductivity(µs/cm)	57530	47490	28680	26870	42290	68180	53710	55100	52300	58330	58970	59500	
5	BOD(mg/l)	BDL	2.3	BDL	2.0	BDL	2.1	BDL	BDL	BDL	2.1	BDL	2.5	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.017	0.04	0.63	0.21	BDL	0.2	0.133	0.11	BDL	0.15	0.55	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.012	BDL	BDL	BDL	BDL	0.006	0.009	0.034	0.009	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	33	79	-	490	490	130	110	540	350	220	240	49	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	110	240	-	1100	1100	540	220	920	540	540	350	130	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	1601	351	71	50	24	47	
11	Turbidity(NTU)	4.0	4.44	8.69	6.46	BDL	2.99	5.16	5.02	BDL	2.56	2.98	3.22	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	6.0	14.0	8.0	2.0	12.0	10.0	16.0	8.0	14.0	4.0	BDL	6.0	
13	Total Alkalinity(mg/l)	12.0	128.0	120.0	110.0	142.0	144.0	120.0	122.0	108.0	48.0	124.0	76.0	
14	Chlorides(mg/l)	18244.4	18869.2	17844.3	10603.8	18971.1	21118	19119.07	18345.4	20034	23743	20791.4	23992	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	17.08	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	0.32	0.05	0.05	BDL	BDL	-	0.1	0.05	0.06	0.2	0.06	
18	Total Hardness(mg/l)	4800.0	9500.0	8400.0	4600.0	8800.0	8000.0	6500.0	5800.0	6280.0	1360.0	7500.0	8200.0	
19	Calcium(mg/l)	641.3	1002.0	1603.2	1442.0	2500.0	881.8	601.2	481.0	385.0	497.0	200.4	641.28	
20	Magnesium(mg/l)	777.6	1336.5	1069.2	243.0	1530.0	1409.4	1215.0	1117.8	1293.0	29.2	1701.0	1603.8	
21	Sulphate(mg/l)	3146.2	3023.4	1075.0	1788.0	2361.7	1290.1	1320.31	7687.3	2787.0	3653.0	3025.5	3618.3	
22	Sodium(mg/l)	6812.0	10438.0	5673.0	3016.0	-	-	1390.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	31698.0	32437.0	18355.0	15047.0	26221.0	40225.0	37649.0	30900.0	36610.0	35087.0	33039.0	32735.0	
24	Total Fixed Solids(mg/l)	30012.0	25586.0	17989.0	14347.0	20167.0	37103.0	28356.0	21997.0	21966.0	33073.0	26020.0	30745.0	
25	Total Suspended Solids(mg/l)	121.0	101.0	17.0	17.0	59.0	70.0	24.0	96.0	42.0	159.0	70.0	121.0	
26	Phosphate(mg/l)	0.074	0.27	0.2	0.09	0.12	BDL	0.09	0.14	0.05	0.06	0.08	0.04	
27	Boron(mg/l)	2.74	4.38	2.11	-	2.57	-	2.3	-	-	-	-	-	
28	Potassium(mg/l)	15.6	213.9	232.7	155.4	-	-	3.0	-	-	-	-	-	
29	Flouride(mg/l)	-	0.74	1.0	0.82	5.18	1.42	1.48	0.78	1.09	2.13	0.78	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.905	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.128	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
37	IronTotal(mg/l)	BDL	-	-	-	-	-	0.321	-	-	-	-	-	

GALGIBAG BEACH 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	29	30	27	27	27	30	30	31	30	30	30	30	
2	Dissolved Oxygen(mg/l)	5.2	6.4	5.4	6.7	5.9	6.8	5.6	6.3	6.0	7.6	6.1	5.9	4 mg/l or more
3	pH	7.7	7.8	6.6	6.4	7.7	7.7	8.6	7.8	7.8	7.8	7.0	7.9	6.5 - 8.5
4	Conductivity(µs/cm)	58130	47720	10115	33920	36760	50000	573	55960	54420	5490	59970	57370	
5	BOD(mg/l)	BDL	2.7	2.9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.08	0.17	0.14	BDL	0.43	BDL	0.12	0.04	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.065	0.043	0.042	0.01	0.012	BDL	0.014	BDL	BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	33	8	-	5400	130	130	4.5	220	130	130	170	13	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	79	23	-	9200	350	350	13	920	240	240	350	23	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	151	221	13	4	4	
11	Turbidity(NTU)	8.69	17.17	12.04	7.16	6.42	4.07	2.13	1.07	1.89	BDL	1.29	3.35	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	14.0	12.0	10.0	6.0	BDL	4.0	BDL	20.0	8.0	16.0	20.0	
13	Total Alkalinity(mg/l)	46.0	124.0	104.0	100.0	96.0	102.0	136.0	126.0	120.0	114.0	114.0	106.0	
14	Chlorides(mg/l)	18884.0	18468.2	12871.0	13370.1	16633.0	14536.3	22618.0	19568.0	19426.6	19669.4	21868.0	19426.0	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	15.68	-	-	-	-	-	
17	Ammonia (mg/l)	0.28	0.13	0.35	0.31	0.05	0.07	-	0.3	0.22	0.09	0.06	BDL	
18	Total Hardness(mg/l)	6800.0	11500.0	5500.0	6000.0	4000.0	4600.0	2800.0	9500.0	17500.0	6600.0	7600.0	8800.0	
19	Calcium(mg/l)	801.6	2004.0	601.2	1002.0	601.2	2200.0	240.5	561.0	4000.0	1600.0	641.0	802.0	
20	Magnesium(mg/l)	291.2	1579.5	972.0	850.5	607.5	583.2	534.6	1968.0	3280.5	1215.0	1458.0	1652.0	
21	Sulphate(mg/l)	3328.0	1862.4	820.3	1953.0	1867.2	2009.8	2274.65	3500.0	4129.31	2266.6	1709.4	3577.0	
22	Sodium(mg/l)	8819.0	8513.0	211.2	4093.0	-	-	1400	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	37211.0	30064.0	10115.0	23744.0	25729.0	28754.0	34428.0	33016.0	32652.0	33504.0	35202.0	40159.0	
24	Total Fixed Solids(mg/l)	25611.0	29891.0	8053.0	18492.0	19837.0	21468.0	33420.0	20132.0	25132.0	21039.0	21864.0	16064.0	
25	Total Suspended Solids(mg/l)	75.0	36.0	68.0	142.0	148.0	61.0	122.0	87.0	152.0	66.0	27.0	88.0	
26	Phosphate(mg/l)	0.15	0.11	BDL	0.07	0.1	0.17	0.064	0.04	0.26	0.04	0.03	0.05	
27	Boron(mg/l)	4.76	0.57	2.6	2.01	3.93	-	2.32	-	-	-	-	-	
28	Potassium(mg/l)	297.1	343	9.5	189.3	-	-	4.2	-	-	-	-	-	
29	Flouride(mg/l)	-	-	0.24	0.26	0.75	0.83	BDL	0.76	0.04	BDL	3.55	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.730	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.028	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.035	-	-	-	-	-	
37	IronTotal(mg/l)	0.26	-	-	-	-	-	0.252	-	-	-	-	-	

COLVA BEACH 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers	
1	Temperature°C	31	32	27	28	Sampling was not done	Sampling was not done	30	31	29	30	31	28		
2	Dissolved Oxygen(mg/l)	6.2	6.3	6.5	5.3			6.4	6.2	6.9	6.5	6.2	6.5	6.5	4 mg/l or more
3	pH	8.1	8.1	7.4	7.7			7.9	7.8	7.8	7.9	7.0	7.9	7.9	6.5 - 8.5
4	Conductivity(us/cm)	48650	47640	31870	33820			49020	55230	85160	57690	57100	59110	59110	
5	BOD(mg/l)	BDL	BDL	BDL	BDL			2.2	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.18	0.03	0.33	0.35			BDL	0.05	BDL	BDL	BDL	0.16	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.011	BDL	0.27			BDL	0.007	0.09	BDL	BDL	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	33	33	-	1100			540	540	79	170	130	49	49	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	79	79	-	2200			920	920	130	350	240	79	79	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-			>1601	33	71	10	34	241	241	
11	Turbidity(NTU)	4.09	15.91	9.86	6.2			BDL	4.51	BDL	1.87	BDL	BDL	BDL	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	6.0	18.0	BDL	2.0			16.0	6.0	14.0	14.0	BDL	16.0	16.0	
13	Total Alkalinity(mg/l)	130	136	118	108			132	116	106	116	20	106	106	
14	Chlorides(mg/l)	18620.0	18369.3	18717.8	12849.3			18869.15	18100.8	23312.0	18835.0	19226.0	15557.0	15557.0	
15	COD(mg/l)	-	-	-	-			-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-			16.52	-	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	0.38	BDL	BDL			-	0.07	BDL	0.11	0.13	0.21	0.21	
18	Total Hardness(mg/l)	10000.0	8000.0	9600.0	22000.0			7000.0	5200.0	6160.0	6600.0	7000.0	7600.0	7600.0	
19	Calcium(mg/l)	3287.0	1002.0	1603.2	5050.1			601.2	400.8	369.0	481.0	481.0	481.0	481.0	
20	Magnesium(mg/l)	437.4	1336.5	1360.8	2284.2			1336.5	1020.6	1273.0	1312.0	1409.4	1555.0	1555.0	
21	Sulphate(mg/l)	1823.0	3726.6	1175.0	1869.0			1945.31	4105.2	2541.0	2578.0	2735.0	2368.0	2368.0	
22	Sodium(mg/l)	8138.0	3057.0	5008.0	3661.0			3300.0	-	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	26769.0	32395.0	18803.0	20630.0			34323.0	33329.0	59612.0	34037.0	39884.0	33267.0	33267.0	
24	Total Fixed Solids(mg/l)	24774.0	24296.0	18001.0	19298.0			25887.0	24102.0	35767.0	18539.0	23884.0	9472.0	9472.0	
25	Total Suspended Solids(mg/l)	137.0	128.0	19.0	15.0			107.0	97.0	83.0	33.0	21.0	21.0	21.0	
26	Phosphate(mg/l)	0.123	0.3	0.19	0.11			0.09	0.14	0.15	0.33	0.07	0.04	0.04	
27	Boron(mg/l)	1.62	3.15	2.3	-			2.3	-	-	-	-	-	-	
28	Potassium(mg/l)	287.6	332.8	223.3	183			220	-	-	-	-	-	-	
29	Flouride(mg/l)	BDL	0.64	0.84	0.79			1.42	0.56	0.92	0.66	1.0	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-			BDL	-	-	-	-	-	-	
31	Cadmium(mg/l)	0.02	-	-	-			0.024	-	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-			0.976	-	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-			BDL	-	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-			0.014	-	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-			BDL	-	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-			0.046	-	-	-	-	-	-	
37	IronTotal(mg/l)	1.48	-	-	-			0.238	-	-	-	-	-	-	

VELSAO BEACH 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	32	28	28	30	30	28	30	29	30	30	28	
2	Dissolved Oxygen(mg/l)	5.9	6.3	6.5	6.9	6.7	7.0	6.2	6.1	7.0	6.5	7.1	6.0	4 mg/l or more
3	pH	8.1	7.9	7.5	7.4	7.9	7.7	7.7	7.6	7.6	7.9	7.8	7.9	6.5 - 8.5
4	Conductivity(µs/cm)	48780	48050	32490	34000	47370	44760	51870	55980	52600	57220	59010	59170	
5	BOD(mg/l)	2.0	2.9	BDL	2.0	2.8	2.3	BDL	2.6	-	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.27	0.34	BDL	0.18	BDL	BDL	1.1	BDL	0.44	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.008	BDL	0.17	BDL	BDL	BDL	BDL	0.049	BDL	0.047	BDL	
8	Fecal Coliform(MPN/100ml)	23	5	-	790	490	170	49	240	170	170	130	33	100 or less MPN/100 ml
9	Total Coliform(MPN/100ml)	33	23	-	1400	1300	920	130	350	350	220	220	79	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	95	48	151	351	50	Absent	
11	Turbidity(NTU)	3.16	7.46	6.97	6.97	4.63	2.02	1.06	1.57	1.04	1.95	2.78	1.15	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	6.0	22.0	BDL	2.0	116.0	6.0	12.0	10.0	4.0	BDL	10.0	4.0	
13	Total Alkalinity(mg/l)	122.0	140.0	104.0	110.0	10.0	120.0	124.0	134.0	128.0	76.0	126.0	82.0	
14	Chlorides(mg/l)	18870	18494.3	17594.7	12100.8	18724.7	18744.2	19427	30990	19833.4	22243	20546.8	22992	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	16.52	-	-	-	-	-	
17	Ammonia (mg/l)	0.037	0.46	BDL	0.05	BDL	BDL	-	0.19	0.14	0.31	0.05	0.25	
18	Total Hardness(mg/l)	7800.0	8500.0	7600.0	5400.0	8000.0	11800.0	5800.0	8600.0	12000.0	7200.0	7800.0	6600.0	
19	Calcium(mg/l)	2405.0	801.6	972.0	1523.0	2000.0	1603.2	529.0	481.0	2500.0	400.8	481.0	480.96	
20	Magnesium(mg/l)	437.4	850.5	972.0	388.8	1458.0	1895.4	1089.0	1798.2	2308.4	1506.6	1603.8	1312.0	
21	Sulphate(mg/l)	1418.6	2984.4	1841.0	1944.0	3087.6	509.3	2725.0	2077.8	770.7	2363.0	2895.7	2692.0	
22	Sodium(mg/l)	8173.0	10896.0	5469.0	4019.0	-	-	11500	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	26840.0	33396.0	20793.0	19720.0	28896.0	28900.0	36309.0	34723.0	32612.0	34322.0	33938.0	32525.0	
24	Total Fixed Solids(mg/l)	24858.0	24967.0	19957.0	17992.0	19376.0	25735.0	21785.0	32602.0	24821.0	33330.0	27019.0	30525.0	
25	Total Suspended Solids(mg/l)	143.0	109.0	13.0	13.0	67.0	78.0	-	120.0	52.0	120.0	72.0	105.0	
26	Phosphate(mg/l)	0.137	0.28	0.22	0.21	0.18	0.2	0.33	0.19	0.2	0.17	0.22	BDL	
27	Boron(mg/l)	1.86	3.68	3.52	-	3.56	-	2.25	-	-	-	-	-	
28	Potassium(mg/l)	290	229.9	226	187.7	-	-	730	-	-	-	-	-	
29	Flouride(mg/l)	BDL	0.54	1.06	0.88	6.12	1.57	1.53	0.22	BDL	2.68	0.75	1.1	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.02	-	-	-	-	-	0.014	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.885	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.103	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	1.31	-	-	-	-	-	0.012	-	-	-	-	-	
37	IronTotal(mg/l)	7.94	-	-	-	-	-	0.313	-	-	-	-	-	

INLET SAMPLE TO STP AT TONCA, PANAJI 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit
1	pH	6.61	6.4	8.3	5.9	6.7	6.3	6.7	6.18	6.6	6.8	6.0	6.5	-
2	BOD(mg/l)	317.0	420.0	450.0	269.0	162.0	440.0	107.91	114.5	139.0	230.0	233.3	371.0	-
3	Fecal Coliform(MPN/100ml)	24000000	-	-	-	-	-	-	-	-	-	-	-	-
4	Total Coliform(MPN/100ml)	54000000	-	-	-	-	-	-	-	-	-	-	-	-
5	Residual Chlorine mg/l	BDL	-	-	-	-	-	0.0	0.0	-	0.35	0.53	1.06	-
6	COD(mg/l)	1200.0	900.0	830.0	540.0	390.0	850.0	360.0	380.0	380.0	480.0	560.0	700.0	-
7	Ammonical Nitrogen mg/l	33	88.8	0.24	0.28	33.3	-	-	30.13	41.8	1.91	3.85	75.0	-
8	Total Suspended Solids(mg/l)	383.0	590.0	165.0	145.0	144.0	540.0	10.0	60.0	139.0	175.0	180.0	280.0	-
9	Phosphate(mg/l)	11.97	18.3	7.98	1.09	20.6	25.9	3.8	3.8	12.1	2.05	3.29	20.0	-
10	MLSS mg/l	555.0	-	-	-	-	-	795.0	-	-	1195.0	1240.0	300.0	-
11	MLVSS mg/l	477.3	-	-	-	-	-	-	-	-	-	730.0	112.0	-
12	Arsenic	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
13	Cadmium	BDL	0.01	-	-	-	BDL	0.017	BDL	-	-	-	-	-
14	Copper	BDL	0.01	-	-	-	0.978	1.067	1.087	-	-	-	-	-
15	Lead	BDL	0.01	-	-	-	BDL	0.055	BDL	-	-	-	-	-
16	Chromium	BDL	0.01	-	-	-	0.031	0.224	0.064	-	-	-	-	-
17	Nickel	BDL	0.01	-	-	-	BDL	BDL	BDL	-	-	-	-	-
18	Zinc	0.06	0.04	-	-	-	0.054	0.071	0.145	-	-	-	-	-
19	IronTotal	3.64	0.37	-	-	-	0.114	1.826	0.134	-	-	-	-	-
20	Manganese	-	0.05	-	-	-	BDL	-	0.204	-	-	-	-	-

OUTLET SAMPLE TO STP AT TONCA, PANAJI 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit
1	pH	6.87	7.1	8.5	6.4	7.5	7.3	7.3	6.2	6.8	7.0	7.1	6.4	5.5-9
2	Dissolved Oxygen(mg/l)	7.1	-	-	-	-	-	-	-	-	-	-	-	
3	BOD(mg/l) mg/l	5.3	8.0	9.2	8.0	9.0	8.0	3.2	5.0	10.8	18.4	16.2	6.0	30mg/l
4	Fecal Coliform(MPN/100ml)	Nil	-	-	-	-	-	-	-	-	Nil	Nil	Nil	
5	Total Coliform(MPN/100ml)	<1.8	-	-	-	-	-	-	-	-	1.8	1.8	<1.8	
6	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	431	-	-	-	-	-	
7	Residual Chlorine mg/l	2.3	0.0	0.0	0.0	0.0	0.0	1.60	3.5	0.0	0.0	0.0	0.0	1mg/l
8	COD(mg/l) mg/l	30.0	40.0	20.0	20.0	50.0	20.0	40.0	50.0	20.0	40.0	30.0	30.0	250mg/l
9	Ammonical Nitrogen mg/l	BDL	0.55	0.12	0.099	0.05			BDL	BDL	0.21	0.09	0.84	50mg/l
10	Total Suspended Solid (mg/l)	9.0	44.0	19.0	16.0	12.0	5.0	43.0	25.0	6.0	14.0	19.0	9.0	100mg/l
11	Phosphate(mg/l) mg/l	0.171	0.08	0.917	0.143	0.6	0.08	0.07	0.116	0.13	0.05	0.145	1.0	-
12	Oil & Grease	-	-	-	-	-	-	-	-	-	-	<10.0	<10.0	
13	MLSS mg/l	14.0	-	-	-	-	-	-	-	-	-	-	-	
14	MLVSS mg/l	12.04	-	-	-	-	-	-	-	-	-	-	-	
15	Arsenic mg/l	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
16	Cadmium mg/l	BDL	BDL	-	-	-	BDL	BDL	BDL	-	-	-	-	
17	Copper mg/l	BDL	BDL	-	-	-	0.858	0.944	1.011	-	-	-	-	
18	Lead mg/l	BDL	BDL	-	-	-	BDL	BDL	BDL	-	-	-	-	
19	Chromium mg/l	BDL	BDL	-	-	-	0.119	0.264	0.015	-	-	-	-	
20	Nickel mg/l	BDL	BDL	-	-	-	-	BDL	BDL	-	-	-	-	
21	Zinc mg/l	BDL	0.09	-	-	-	0.053	0.013	0.081	-	-	-	-	
22	Iron mg/l	0.64	BDL	-	-	-	0.057	0.166	0.119	-	-	-	-	
23	Manganese mg/l	-	BDL	-	-	-	0.012	-	0.010	-	-	-	-	

CHAPOLI DAM 2019-2020

Sr. No	Parameters	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	30	27	27	27	27	27	30	29	29	29	29	
2	Dissolved Oxygen(mg/l)	8.3	7.7	7.0	7.5	7.8	7.6	7.3	8.3	7.0	7.9	7.4	7.8	4 mg/l or more
3	pH	6.6	7.3	6.7	6.7	7.0	7.4	7.4	7.1	7.1	7.1	7.0	7.6	6-9
4	Conductivity(µs/cm)	73.84	62	77	79	57	56	161	65	460	67	60	85	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.11	0.26	0.27	BDL	BDL	BDL	0.13	0.16	0.06	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.068	BDL	0.276	BDL	0.01	BDL	0.088	0.006	0.028	BDL	BDL	
8	Fecal Coliform(MPN/100ml)	13	2	-	2400	230	33	13	490	540	1300	1300	23	
9	Total Coliform(MPN/100ml)	17	5	-	5400	790	79	33	1300	920	2200	3500	33	5000 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	27	>1601	13	15	10	
11	Turbidity(NTU)	2.41	4.37	5.42	5.42	2.45	1.18	1.35	4.87	1.89	1.11	4.76	10.2	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	14.0	38.0	18.0	18.0	24.0	18.0	34.0	42.0	30.0	24.0	46.0	26.0	
14	Chlorides(mg/l)	17.1	14.9	12.5	14.0	7.23	9.9	10.0	9.0	5.34	7.77	8.0	9.0	
15	COD(mg/l)	6.0	2.0	16.0	14.0	14.0	7.0	6.0	4.0	4.0	6.0	18.0	4.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	7.0	-	-	-	-	-	
17	Ammonia (mg/l)	0.13	0.16	0.1	0.1	BDL	0.05	-	0.07	0.16	0.08	BDL	BDL	
18	Total Hardness(mg/l)	34.0	60.0	16.0	14.0	16.0	22.0	14.0	22.0	40.0	32.0	22.0	28.0	
19	Calcium(mg/l)	6.4	12.0	3.2	3.2	3.2	12.0	3.2	6.0	20.0	14.0	BDL	6.4	
20	Magnesium(mg/l)	2.33	7.3	BDL	1.46	BDL	2.4	BDL	2.0	4.9	4.4	4.4	3.0	
21	Sulphate(mg/l)	5.6	7.13	8.72	7.28	BDL	BDL	BDL	2.0	7.16	BDL	BDL	3.4	
22	Sodium(mg/l)	13.0	19.8	47.9	4.4	-	-	39.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	44.0	41.0	46.0	45.0	31.0	31.0	98.0	38.0	276.0	42.0	36.0	58.0	
24	Total Fixed Solids(mg/l)	24.0	33.0	37.0	38.0	26.0	13.0	80.0	15.0	162.0	23.0	28.0	22.0	
25	Total Suspended Solids(mg/l)	9.0	10.0	8.0	6.0	9.0	10.0	9.0	42.0	18.0	12.0	11.0	14.0	
26	Phosphate(mg/l)	0.12	BDL	BDL	BDL	0.03	0.04	0.02	0.12	0.4	0.03	BDL	0.15	
27	Boron(mg/l)	BDL	1.39	0.41	0.14	0.83	-	0.92	-	-	-	-	-	
28	Potassium(mg/l)	1.6	2.3	1.7	0.1	-	-	1.1	-	-	-	-	-	
29	Flouride(mg/l)	-	-	BDL	BDL	BDL	BDL	0.88	BDL	BDL	BDL	0.49	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.016	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.638	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.048	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.105	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
37	IronTotal(mg/l)	0.84	-	-	-	-	-	0.208	-	-	-	-	-	