

1) CETP Inlet Parameters

Table 18: Inlet effluent parameters to CETP

S. No.	Parameter	Unit	CETP Inlet
1	PH		5.5-9.0
2	COD	Mg/L	2000
3	BOD	Mg/L	700
4	Total Suspended Solids	Mg/L	500
5	Oil & Grease	Mg/L	50
6	Total Dissolved Solids	Mg/L	4500
7	Chromium Total (as Cr)	Mg/L	10
8	Zinc	Mg/L	10
9	Copper	Mg/L	0.5
10	Nickel	Mg/L	10
11	Sulphate	Mg/L	591
12	Chloride	Mg/L	946
13	Lead	Mg/L	0.1
14	Mercury	Mg/L	0.01
15	Total Iron	Mg/L	50
16	Nitrate	Mg/L	99
17	Total Hardness	Mg/L	544
18	Total Chromium	Mg/L	10
19	Phosphate	Mg/L	9
20	Ammonical Nitrogen	Mg/L	50
21	Total Kjeldal Nitrogen	Mg/L	100
22	Arsenic	Mg/L	0.2
23	cadmium	Mg/L	2
24	selenium	Mg/L	0.05
25	Cyanide	Mg/L	0.2
26	Fluoride	Mg/L	2
27	Sulphide	Mg/L	2
28	Phenolic Compounds	Mg/L	1
29	Sulphates	Mg/L	1000
30	Boron	Mg/L	0.2

1) CETP Outlet Parameters

Table 19: Design basis for outlet to UF-RO system

Sl. No.	Parameter	Unit	ZLD Outlet
1	PH		7.0 - 8.5
2	Total Dissolved Solids	Mg/L	<1000
3	Chromium Total (as Cr)	Mg/L	0.05
4	Zinc	Mg/L	5
5	Copper	Mg/L	0.05
6	Sulphate	Mg/L	200
7	Chloride	Mg/L	200
8	Cyanide	Mg/L	0.05
9	Cadmium	Mg/L	0.01
10	Lead	Mg/L	0.05
11	Fluoride	Mg/L	1.0
12	Mercury	Mg/L	0.001
13	Selenium	Mg/L	0.01
Sl. No.	Parameter	Unit	ZLD Outlet
14	Residual Chlorine	Mg/L	0.2
15	Phenolic Compounds	Mg/L	0.001
16	Iron	Mg/L	0.1
17	Manganese	Mg/L	0.05
18	Calcium	Mg/L	75
19	Magnesium	Mg/L	<30
20	Arsenic	Mg/L	0.01
21	Nitrates	Mg/L	45
22	Total Hardness	Mg/L	200
23	Turbidity		1
24	Anionic Detergents		0.2
25	Mineral oil	mg/L	0.01
26	Polynuclear aromatic hydrocarbons		0.2
27	Aluminium	Mg/l	0.03
28	Alkalinity	Mg/L	200

Note: - If there are 250 mg/l of sulphates, Mg content can be increased to a maximum of 125 mg/l with the reduction of sulphates at the rate of 1 unit per every 2.5 units of sulphates.

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