

Annex F6

Effluent Quality Monitoring Results

Table F6.1 Effluent Monitoring Results

		1 Mar 22	2 Mar 22	3 Mar 22	4 Mar 22	5 Mar 22	6 Mar 22	7 Mar 22	8 Mar 22	9 Mar 22	10 Mar 22	11 Mar 22
On-site Measurements												
Temperature	°C	30.1	30	27.8	30.1	28.9	24.9	27.7	28.7	28.5	32.7	32.6
pH Value	pH Unit	8.3	8.4	8.4	8.4	8.4	8.5	8.5	8.5	8.4	8.4	8.5
Volume Discharged	m³	1341	1496	1496	1498	1372	678	644	1367	1497	1380	950
Laboratory Analysis												
Suspended Solids (SS)	mg/L	27	38.7	16.7	18.3	19.2	17.1	14.2	23.9	20.4	31.5	22.6
Alkalinity	mg/L	1460	1540	1520	1470	1530	1750	1830	1670	1980	2070	2260
Ammoniacal-nitrogen	mg/L	0.35	0.29	0.35	0.31	0.35	0.38	0.47	0.31	0.34	0.37	0.33
Chloride	mg/L	1420	1550	1400	1390	1520	1690	1780	1610	1850	1700	1910
Nitrite-nitrogen	mg/L	0.11	0.11	0.11	0.13	0.16	0.15	0.44	0.11	0.14	0.14	0.16
Phosphate	mg/L	4.41	4.98	5.29	5.47	5.98	6.82	7.25	6.95	9	9.8	10.1
Sulphate	mg/L	199	157	181	182	181	163	164	175	164	128	122
Total Nitrogen	mg/L	69.6	96.4	87.9	96.3	98.6	91.4	84.2	78.5	84.7	100	116
Nitrate-nitrogen	mg/L	32.3	46.7	49.6	56	57.2	45	37.5	37.6	37.3	48.7	61.4
Total Inorganic Nitrogen	mg/L	32.8	47.1	50.1	56.4	57.7	45.5	38.4	38.0	37.8	49.2	61.9
Biochemical Oxygen Demand (BOD)	mg/L	8	9	13	13	10	6	7	9	6	7	7
Chemical Oxygen Demand (COD)	mg/L	710	692	983	619	856	902	826	790	826	1190	544
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	334	314	313	311	326	334	333	341	390	395	387
Boron	µg/L	3560	4380	4190	4330	4520	4690	4590	4340	5140	5040	5200
Calcium	mg/L	56.5	56	53.7	58.5	51.6	50.9	47.2	37.4	29.4	32.4	26.7
Iron	mg/L	0.86	1.08	0.99	1.01	1.05	1.19	1.08	1.14	1.14	1.24	1.31
Magnesium	mg/L	21.3	22.6	22.3	22.4	21.6	24.9	23.8	21.1	21.2	24	23.9
Potassium	mg/L	561	665	686	689	691	709	776	652	697	777	877
Cadmium	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	88	88	88	86	90	105	102	92	106	126	134
Copper	µg/L	<10	23	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nickel	µg/L	85	85	84	80	86	107	108	100	110	118	125
Zinc	µg/L	59	76	52	46	48	56	54	61	61	54	56

		12 Mar 22	13 Mar 22	14 Mar 22	15 Mar 22	16 Mar 22	17 Mar 22	18 Mar 22	19 Mar 22	20 Mar 22	21 Mar 22	22 Mar 22	23 Mar 22
On-site Measurements													
Temperature	°C	29.3	30.9	31.7	29.7	28.9	31.9	31.9	29.1	25.8	29.9	29.7	25.1
pH Value	pH Unit	8.5	8.4	8.4	8.5	8.4	8.5	8.5	8.4	8.4	8.5	8.5	8.5
Volume Discharged	m³	730	665	366	764	1143	1141	1125	1178	793	357	1033	1341
Laboratory Analysis													
Suspended Solids (SS)	mg/L	23.4	84.8	10.7	14.6	20.4	21.8	31.6	12.5	14.7	19.5	19.2	20.2
Alkalinity	mg/L	2300	2310	2310	2100	1750	1860	2020	1950	2040	2320	2170	2230
Ammoniacal-nitrogen	mg/L	0.34	0.31	1.39	0.59	0.33	0.37	0.33	0.32	0.34	0.39	0.36	0.35
Chloride	mg/L	1970	2060	2080	1800	1570	1650	1720	1690	1740	2150	1910	1950
Nitrite-nitrogen	mg/L	0.19	0.23	1.12	1.18	0.14	0.16	0.18	0.18	0.18	0.29	0.18	0.18
Phosphate	mg/L	10.2	9.97	10.4	9.55	8.23	8.3	8.5	8.1	7.89	9.96	8.53	8.43
Sulphate	mg/L	121	118	116	140	177	170	152	153	139	114	133	130
Total Nitrogen	mg/L	112	120	112	104	78	83.9	102	96.7	94.4	107	106.0	110.0
Nitrate-nitrogen	mg/L	57.3	61.1	60.8	55	37.8	39.2	45.7	47.7	45.6	51.5	53.8	55.4
Total Inorganic Nitrogen	mg/L	57.8	61.6	63.3	56.8	38.3	39.7	46.2	48.2	46.1	52.2	54.3	55.9
Biochemical Oxygen Demand (BOD)	mg/L	7	12	8	8	11	9	12	8	7	8	7	10
Chemical Oxygen Demand (COD)	mg/L	516	590	982	1010	892	964	903	1050	1090	1130	993	1050
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	488	418	410	350	332	355	394	372	418	497	412	404
Boron	µg/L	5370	5530	5320	5170	3830	4390	4900	4950	4930	5530	5480	5570
Calcium	mg/L	26	24.6	22.9	23.9	26.3	22.9	21.8	21.5	20.3	18.9	19.5	20.4
Iron	mg/L	1	1.42	1.27	1.28	1.18	1.19	1.4	1.33	1.46	1.46	1.54	1.63
Magnesium	mg/L	24	24.4	23.2	24	24.2	22.6	23.9	24.7	24.5	26.9	25.9	27.6
Potassium	mg/L	882	888	900	820	622	707	784	735	774	922	836	874
Cadmium	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	140	143	141	127	104	107	121	109	112	126	123	134
Copper	µg/L	<10	23	<10	<10	<10	<10	15	<10	<10	<10	<10	<10
Nickel	µg/L	130	130	127	119	98	103	112	101	107	122	115	119
Zinc	µg/L	62	100	67	73	97	102	113	106	104	69	99	102