

WWTP Effluent Monitoring

Annual Summary

31/03/2012 to 30/11/2024



*Notes regarding Licence Limits

A single number denotes a maximum value that should not be exceeded.

Two numbers separated by a slash " / " denote a 90% limit and a maximum limit.

Two numbers separated by a dash " - " denote minimum and maximum limits.

90 percentiles explained

Within a licence for each pollutant listed by the EPA, it will have a limit value. This value may be a 100 percentile limit where samples must meet the limit value 100% of the time. Lower limits may also be assigned.

Where there are limit values lower than a 100% limit a sample or samples test results can exceed the limit value. For example, if a 90 percentile limit is assigned to a pollutant, this means 90% of collected samples should meet the limit value. If 10 samples are required in a year only one sample of the ten samples for the year is allowed to exceed the 90 percentile limit value. If more than one sample exceeds this value this would be a non-compliance of the licence conditions.

Treatment Plant: Tumbulum

EPA Licence Number: 5622

License Year: 24 March to 23 March

Monitoring Point: TuWWTP/Effluent

EPA Point: Point 1

Summary Period	Pollutant	Units	Count	Min	Max	Mean	90% Value	Limits*	Exceedance
24/03/2012 to 23/03/2013 Published: 22 Apr	Ammonia	mg/L	26	0.58	6.8	1.75	3.675	5 / 10	No
	BOD5	mg/L	26	<1.0	5.7	1.82	2.5	15 / 35	No
	Oil & Grease	mg/L	26	<2	3	2	2.0	na	-
	pH	pH units	26	6.3	7.3	7.03	7.2	6.5-8.5	Yes
	Suspended Solids	mg/L	26	1.8	19.0	6.04	10.5	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	26	<1	2300	94	13.5	200 / 600	Yes
	Total Nitrogen	mg/L	26	2.28	13.9	6.23	10.71	15 / 25	No
	Total Phosphorus	mg/L	26	0.08	1.05	0.34	0.475	1 / 3	No
Summary Period	Pollutant	Units	Count	Min	Max	Mean	90% Value	Limits*	Exceedance
24/03/2013 to 23/03/2014 Published: 02 Apr	Ammonia	mg/L	26	0.32	4.86	1.61	2.975	5 / 10	No
	BOD5	mg/L	26	<1.0	4.2	1.98	3.1	15 / 35	No
	Oil & Grease	mg/L	26	<2	3	2	0.0	na	-
	pH	pH units	26	6.6	7.1	6.97	7.1	6.5-8.5	No
	Suspended Solids	mg/L	26	4.4	18.0	8.52	14.5	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	26	<1	30	5	8.5	200 / 600	No
	Total Nitrogen	mg/L	26	2.82	12.94	4.82	7.89	15 / 25	No
	Total Phosphorus	mg/L	26	0.02	1.1	0.39	0.64	1 / 3	No

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Summary Period	Pollutant	Units	Count	Min	Max	Mean	90% Value	Limits*	Exceedance
24/03/2014 to 23/03/2015 Published: 01 Apr	Ammonia	mg/L	26	0.9	11.4	2.13	3.67	5 / 10	Yes
	BOD5	mg/L	26	<1.0	4.2	1.88	3.6	15 / 35	No
	Oil & Grease	mg/L	26	<2	4	2	2.0	na	-
	pH	pH units	26	6.3	7.2	6.84	7.1	6.5-8.5	Yes
	Suspended Solids	mg/L	26	1.4	13.0	6.76	11.0	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	26	<1	15	3	7.0	200 / 600	No
	Total Nitrogen	mg/L	26	1.98	14.4	4.99	9.61	15 / 25	No
	Total Phosphorus	mg/L	26	0.06	1.16	0.27	0.445	1 / 3	No
24/03/2015 to 23/03/2016 Published: 13 Apr	Ammonia	mg/L	26	0.92	3.4	1.79	2.775	5 / 10	No
	BOD5	mg/L	26	<1.0	4.8	2.46	3.9	15 / 35	No
	Oil & Grease	mg/L	26	<2	5	2	2.5	na	-
	pH	pH units	26	6.7	7.6	6.93	7.1	6.5-8.5	No
	Suspended Solids	mg/L	26	<1.0	8.2	4.41	7.5	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	26	<1	3700	158	46.5	200 / 600	Yes
	Total Nitrogen	mg/L	26	3.27	24.2	7.26	10.765	15 / 25	No
	Total Phosphorus	mg/L	26	0.19	0.47	0.3	0.425	1 / 3	No
24/03/2016 to 23/03/2017 Published: 04 May	Ammonia	mg/L	26	0.67	28.89	2.66	2.765	5 / 10	Yes
	BOD5	mg/L	26	<1.0	21.0	2.52	3.2	15 / 35	No
	Oil & Grease	mg/L	26	<2	6	2	0.0	na	-
	pH	pH units	26	6.5	7.2	6.93	7.1	6.5-8.5	No
	Suspended Solids	mg/L	26	1.0	78.0	7.55	12.0	20 / 40	Yes
	Thermotolerant Coliforms	cfu/100 ml	26	<1	46	8	25.0	200 / 600	No
	Total Nitrogen	mg/L	26	2.45	35.23	7.27	10.685	15 / 25	Yes
	Total Phosphorus	mg/L	26	0.14	1.77	0.41	0.58	1 / 3	No
24/03/2017 to 23/03/2018 Published: 09 Apr	Ammonia	mg/L	26	0.62	8.03	1.88	2.68	5 / 10	No
	BOD5	mg/L	26	<1.0	3.6	1.91	2.7	15 / 35	No
	Oil & Grease	mg/L	26	<2.0	3.3	2.14	2.68	na	-

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Summary Period 24/03/2017 to 23/03/2018 Published: 09 Apr	pH	pH units	26	6.7	7.2	6.9	7.1	6.5-8.5	No
	Suspended Solids	mg/L	26	<1.0	12.0	4.34	6.8	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	26	<1	96	20	59.0	200 / 600	No
	Total Nitrogen	mg/L	26	2.44	15.92	5.46	8.385	15 / 25	No
	Total Phosphorus	mg/L	26	0.13	0.43	0.24	0.305	1 / 3	No
Summary Period 24/03/2018 to 23/03/2019 Published: 03 Apr	Pollutant	Units	Count	Min	Max	Mean	90% Value	Limits*	Exceedance
	Ammonia	mg/L	26	0.62	2.84	1.6	2.47	5 / 10	No
	BOD5	mg/L	26	1.0	3.8	1.95	3.0	15 / 35	No
	Oil & Grease	mg/L	26	<2.0	6.0	2.2	0.0	na	-
	pH	pH units	26	6.6	7.2	7.0	7.2	6.5-8.5	No
	Suspended Solids	mg/L	26	<1.0	7.8	2.7	4.0	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	26	<1	624	33	19.0	200 / 600	Yes
	Total Nitrogen	mg/L	26	2.21	9.12	3.7	5.26	15 / 25	No
Total Phosphorus	mg/L	26	0.13	1.17	0.31	0.46	1 / 3	No	
Summary Period 24/03/2019 to 23/03/2020 Published: 08 Apr	Pollutant	Units	Count	Min	Max	Mean	90% Value	Limits*	Exceedance
	Ammonia	mg/L	26	1.3	5.68	2.44	3.97	5 / 10	No
	BOD5	mg/L	26	<1.0	6.0	2.62	4.4	15 / 35	No
	Oil & Grease	mg/L	26	<2	4	2	1.0	na	-
	pH	pH units	26	6.7	7.2	6.94	7.1	6.5-8.5	No
	Suspended Solids	mg/L	26	<1.0	8.2	3.88	6.15	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	26	<1	380	28	51.5	200 / 600	No
	Total Nitrogen	mg/L	26	2.47	13.3	5.12	7.92	15 / 25	No
Total Phosphorus	mg/L	26	0.15	0.46	0.27	0.36	1 / 3	No	

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Summary Period	Pollutant	Units	Count	Min	Max	Mean	90% Value	Limits*	Exceedance
24/03/2020 to 23/03/2021 Published: 07 Apr	Ammonia	mg/L	26	1.67	14.0	2.99	3.42	5 / 10	Yes
	BOD5	mg/L	26	<1.0	6.9	2.77	4.3	15 / 35	No
	Oil & Grease	mg/L	26	<2	4	2	2.5	na	-
	pH	pH units	26	6.8	7.3	7.02	7.2	6.5-8.5	No
	Suspended Solids	mg/L	26	1.6	9.8	4.18	6.0	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	26	1	89	19	60.0	200 / 600	No
	Total Nitrogen	mg/L	26	2.53	20.4	4.99	7.425	15 / 25	No
	Total Phosphorus	mg/L	26	0.19	0.52	0.27	0.365	1 / 3	No
24/03/2021 to 23/03/2022 Published: 04 Apr	Ammonia	mg/L	27	0.85	13.9	3.6	5.402	5 / 10	Yes
	BOD5	mg/L	27	<1.0	14.0	3.43	6.84	15 / 35	No
	Oil & Grease	mg/L	27	<2	4	2	2.0	na	-
	pH	pH units	27	6.6	7.4	7.01	7.14	6.5-8.5	No
	Suspended Solids	mg/L	27	1.6	14.0	4.22	6.64	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	27	<1	90000	3393	146.4	200 / 600	Yes
	Total Nitrogen	mg/L	27	2.25	16.5	5.92	11.164	15 / 25	No
	Total Phosphorus	mg/L	27	0.12	0.83	0.29	0.374	1 / 3	No
24/03/2022 to 23/03/2023 Published: 05 Apr	Ammonia	mg/L	27	0.46	26.6	2.69	3.1	5 / 10	Yes
	BOD5	mg/L	27	<1.0	7.8	2.39	6.96	15 / 35	No
	Oil & Grease	mg/L	27	<2	2	2	0.8	na	-
	pH	pH units	27	6.8	7.4	7.11	7.2	6.5-8.5	No
	Suspended Solids	mg/L	27	<1.0	27.0	4.53	7.6	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	26	<1	125000	4936	625.0	200 / 600	Yes
	Total Nitrogen	mg/L	27	2.01	27.8	5.56	11.6	15 / 25	Yes
	Total Phosphorus	mg/L	27	0.13	0.69	0.38	0.612	1 / 3	No
24/03/2023 to 23/03/2024 Published: 03 Apr	Ammonia	mg/L	26	1.64	4.31	2.5	3.15	5 / 10	No
	BOD5	mg/L	26	<1.0	4.5	1.62	2.7	15 / 35	No
	Oil & Grease	mg/L	26	<2	3	2	0.0	na	-

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Summary Period 24/03/2023 to 23/03/2024 Published: 03 Apr	pH	pH units	26	6.7	7.1	6.92	7.05	6.5-8.5	No
	Suspended Solids	mg/L	26	<1.0	12.0	2.46	4.0	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	27	<1	390	41	80.4	200 / 600	No
	Total Nitrogen	mg/L	26	2.48	17.5	4.45	5.75	15 / 25	No
	Total Phosphorus	mg/L	26	0.26	1.36	0.44	0.59	1 / 3	No
Summary Period 24/03/2024 to 23/03/2025 Published: 06 Nov	Pollutant	Units	Count	Min	Max	Mean	90% Value	Limits*	Exceedance
	Ammonia	mg/L	18	1.04	3.23	2.18	2.961	5 / 10	No
	BOD5	mg/L	18	<1.0	9.0	2.54	4.62	15 / 35	No
	Oil & Grease	mg/L	18	<2	3	2	0.0	na	-
	pH	pH units	18	6.8	7.2	6.98	7.1	6.5-8.5	No
	Suspended Solids	mg/L	18	<1.0	5.0	2.48	4.26	20 / 40	No
	Thermotolerant Coliforms	cfu/100 ml	18	2	2720	164	28.6	200 / 600	Yes
	Total Nitrogen	mg/L	18	1.89	7.44	4.08	6.543	15 / 25	No
	Total Phosphorus	mg/L	18	0.16	0.37	0.27	0.336	1 / 3	No