



DUNGG WASTEWATER TREATMENT WORKS - ANNUAL POLLUTION MONITORING SUMMARY

Environment Protection Licence No. 4197
 Date Obtained: 4 April 2017
 Date Published: 27 April 2017

Licensee Hunter Water Corporation
 36 Honeysuckle Drive
 NEWCASTLE WEST NSW 2302

QUALITY MONITORING

Site Code 5DU0001		Site Description - Effluent Storage Pond														
Pollutant	Unit of Measurement	Sampling Frequency	No. of times measured during the year for licence reporting *	Annual Summary 24 June 2016 to 31 March 2017												
				Minimum	Maximum	50%ile Limit	50%ile Actual	90%ile Limit	90%ile Actual	3DGM Limit	3DGM Maximum	100%ile Limit	100%ile Actual	Within Limits		
Biochemical Oxygen Demand	milligrams per litre	Weekly	40	<2	23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorophyll a	micrograms per litre	Weekly	40	4	295	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Faecal Coliforms	colony forming units per 100 mL	Weekly	40	91	47000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrogen (Total)	milligrams per litre	Weekly	40	5.7	16.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	milligrams per litre	Weekly	40	<2	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH	pH	Weekly	40	7.18	9.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus-unfiltered sample	milligrams per litre	Weekly	40	2.8	5.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids	milligrams per litre	Weekly	40	<1	56	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* Licence varied on 24 June 2016. Monitoring data for all samples collected from the Effluent Storage Pond during the Annual Return period. Relevant samples from the complete data set have been attributed to discharge through each monitoring point and are presented below in separate tables. * As per the note under the licence condition M2.3, it is acceptable for the licensee to take a single sample of Storage Pond water (5DU0001) monthly to meet the monitoring requirements for Points 3, 4 and 5, provided that sample is representative of waters discharged via Points 3, 4 and 5.

EPA Id. No. 3 Site Code 5DU0017		Site Description - Discharges to Utilisation Area														
Pollutant	Unit of Measurement	Sampling Frequency	No. of times measured during the year for licence reporting *	Annual Summary 24 June 2016 to 31 March 2017												
				Minimum	Maximum	50%ile Limit	50%ile Actual	90%ile Limit	90%ile Actual	3DGM Limit	3DGM Maximum	100%ile Limit	100%ile Actual	Within Limits		
Biochemical Oxygen Demand	milligrams per litre	Weekly	30	<2	23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorophyll a	micrograms per litre	Weekly	30	4	295	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Faecal Coliforms	colony forming units per 100 mL	Weekly	30	91	47000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrogen (Total)	milligrams per litre	Weekly	30	7.3	16.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	milligrams per litre	Weekly	30	<2	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH	pH	Weekly	30	7.18	9.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus-unfiltered sample	milligrams per litre	Weekly	30	2.8	5.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids	milligrams per litre	Weekly	30	4	56	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Monitoring data taken from Effluent Storage Pond for each week that discharge occurred during via Point 3. This data is from the same data set that comprises Table 1.

* As per the note under the licence condition M2.3, it is acceptable for the licensee to take a single sample of Storage Pond water (5DU0001) monthly to meet the monitoring requirements for Points 3, 4 and 5, provided that sample is representative of waters discharged via Points 3, 4 and 5.

EPA Id. No. 4 Site Code 5DU0006		Site Description - Pumped Discharges to Williams River														
Pollutant	Unit of Measurement	Sampling Frequency *	No. of times measured during the year for licence reporting	Annual Summary 1 April 2016 to 31 March 2017												
				Minimum	Maximum	50%ile Limit	50%ile Actual	90%ile Limit	90%ile Actual	3DGM Limit	3DGM Maximum	100%ile Limit	100%ile Actual	Within Limits		
Biochemical Oxygen Demand	milligrams per litre	Weekly	3	3	9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorophyll a	micrograms per litre	Weekly	3	20.0	39.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Faecal Coliforms	colony forming units per 100 mL	Weekly	3	91	2400	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrogen (Total)	milligrams per litre	Weekly	3	9.6	13.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	milligrams per litre	Weekly	3	<2	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH	pH	Weekly	3	7.59	8.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus-unfiltered sample	milligrams per litre	Weekly	3	3.5	4.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids	milligrams per litre	Weekly	3	6	26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Monitoring data taken from Effluent Storage Pond for each week that discharge occurred during via Point 4. This data is from the same data set that comprises Table 1.

* As per the note under the licence condition M2.3, it is acceptable for the licensee to take a single sample of Storage Pond water (5DU0001) monthly to meet the monitoring requirements for Points 3, 4 and 5, provided that sample is representative of waters discharged via Points 3, 4 and 5.

EPA Id. No. 5 Site Code 5DU0016		Site Description - Overflow from Effluent Storage Pond														
Pollutant	Unit of Measurement	Sampling Frequency *	No. of times measured during the year for licence reporting #	Annual Summary 1 April 2016 to 31 March 2017												
				Minimum	Maximum	50%ile Limit	50%ile Actual	90%ile Limit	90%ile Actual	3DGM Limit	3DGM Maximum	100%ile Limit	100%ile Actual	Within Limits		
Biochemical Oxygen Demand	milligrams per litre	Weekly	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorophyll a	micrograms per litre	Weekly	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Faecal Coliforms	colony forming units per 100 mL	Weekly	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrogen (Total)	milligrams per litre	Weekly	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	milligrams per litre	Weekly	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH	pH	Weekly	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus-unfiltered sample	milligrams per litre	Weekly	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids	milligrams per litre	Weekly	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

No discharge occurred from Point 5 during the licence period.

* As per the note under the licence condition M2.3, it is acceptable for the licensee to take a single sample of Storage Pond water (5DU0001) monthly to meet the monitoring requirements for Points 3, 4 and 5, provided that sample is representative of waters discharged via Points 3, 4 and 5.

EPA Id. No. 8 Site Code 5DU0002		Site Description - Humus Effluent														
Pollutant	Unit of Measurement	Sampling Frequency	No. of times measured during the year for licence reporting **	Annual Summary 24 June 2016 to 31 March 2017												
				Minimum	Maximum	50%ile Limit	50%ile Actual	90%ile Limit	90%ile Actual	3DGM Limit	3DGM Maximum	100%ile Limit	100%ile Actual	Within Limits		
Biochemical Oxygen Demand	milligrams per litre	Weekly	40	5	75	40	33	50	54	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorophyll a	micrograms per litre	Weekly	40	<1.0	62.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Faecal Coliforms	colony forming units per 100 mL	Weekly	40	9000	5100000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrogen (Total)	milligrams per litre	Weekly	40	15.0	35.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	milligrams per litre	Weekly	40	<2	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH	pH	Weekly	40	6.9	7.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Phosphorus-unfiltered sample	milligrams per litre	Weekly	40	3.2	7.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids	milligrams per litre	Weekly	40	7	178	50	55	80	90	N/A	N/A	N/A	N/A	N/A	N/A	N/A

** Licence varied 24 June 2016 to include licence monitoring Point 8 - Humus Effluent.